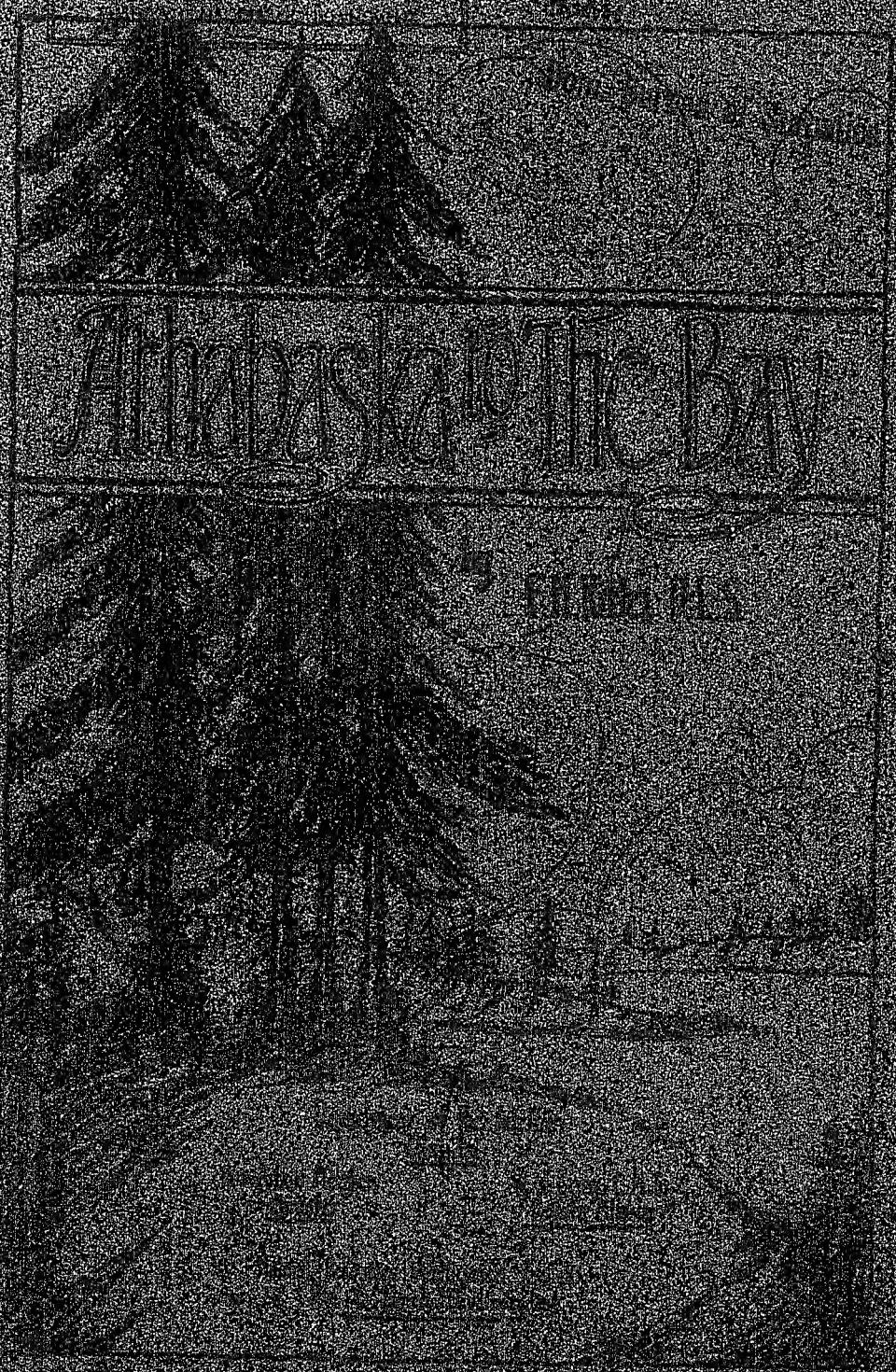


THE
MOUNTAIN



Archaic Bay

THE

THE



CANADA

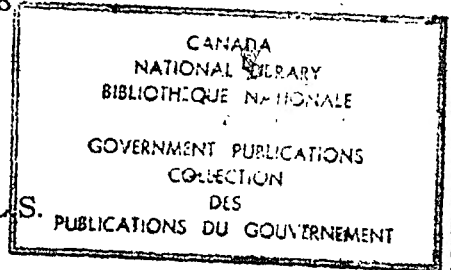
NATIONAL LIBRARY
BIBLIOTHÈQUE NATIONALE

85 INTE

ATHABASKA TO THE BAY

Report of a reconnaissance expedition, chiefly by canoe, from
Edmonton and McMurray across the northern parts of Alberta,
Saskatchewan and Manitoba to Port Nelson and Churchill on
Hudson Bay, 1918.

BY
F. H. KITTO, D.L.S.



DEPARTMENT OF THE INTERIOR
CANADA

HON. ARTHUR MEIGHEN,
Minister.

W. W. CORY, C.M.G.
Deputy Minister.

ISSUED FROM
NATURAL RESOURCES INTELLIGENCE BRANCH
F. C. C. LYNCH, Superintendent.

OTTAWA
J. DE LABROQUERIE TACHÉ
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1919

85-INTE

CONTENTS.

	PAGE.
Edmonton to Fort McMurray.....	5
Fort McMurray to Ile a la Crosse.....	9
Ile a la Crosse to Lac la Ronge.....	15
Lac la Ronge to The Pas.....	21
The Pas to Norway House.....	25
Norway House to Hudson Bay.....	29
Port Nelson to Churchill and Return.....	33
Notes on Natural Resources.....	37

ILLUSTRATIONS.

	PAGE
Legislative buildings, Edmonton.....	10
End of steel, Mile 275. A.G.W.Ry.....	10
Main Street, Fort McMurray.....	10
Hudson's Bay post, Buffalo river.....	10
Indian encampment, La Loche lake.....	10
Horses and cattle grazing, Ile a la Crosse.....	10
Hudson's Bay post, Ile a la Crosse.....	10
Summer hotel, Lac la Biche.....	10
Revillon's post, Ile a la Crosse.....	10
Packing over La Loche (Methye) portage.....	10
Community building, The Pas.....	19
North shore Churchill river at Stanley.....	19
Rapids on Churchill river below Stanley.....	19
Hudson's Bay post, Lac la Ronge.....	19
Pelican Narrows, Hudson's Bay post in foreground.....	19
Scooping rapids, Sturgeon-Weir river.....	19
Dipper rapids, Churchill river.....	19
Falls on Rapid river.....	19
Fishing boat on Sturgeon lake.....	19
Copper ore dump, Sturgeon Landing.....	26
Hudson's Bay post, Chemahawin.....	26
Hudson's Bay post, Cumberland House.....	26

	PAGE
The Waterman, Cumberland House.....	26
Prospector's cabin, Beaver (Amisk) lake.....	26
Fire ranger's lookout tower, Stanley.....	26
S.S. <i>Nipawin</i> on Saskatchewan river.....	26
Old Hudson's Bay residence, head of Grand rapids.....	32
Hudson's Bay post, Cross lake.....	32
Hudson's Bay post, Norway House.....	32
Fire ranger's headquarters, Norway House.....	32
Hudson Bay Railway bridge over Nelson river at Kettle Rapids.....	32
Entrance to Churchill harbour.....	32
Engineer's camp, Port Nelson.....	32
Indian industrial school, Norway House.....	32
Sea River Falls, Nelson river.....	32
Hudson's Bay post, Churchill.....	38
Royal Northwest Mounted Police Barracks, Churchill.....	38
Gateway, Fort Prince of Wales.....	38
Group of Esquimaux, flanked by whites, Churchill.....	38
Esquimo's grave at Fort Prince of Wales.....	38
Esquimaux whale boat, Churchill.....	38

MAP.

	PAGE
Map of The Three Prairie Provinces of Western Canada showing route followed from Edmonton to Churchill	41

ATHABASKA TO THE BAY.

Edmonton to Fort McMurray.

During the summer of 1918 it was my privilege to undertake an extended canoe trip through these portions of the hinterlands of the prairie provinces so little known to the general public. The northern part of Alberta has been well advertised and brought more or less to the fore through the medium of the famous Peace River District which occupies the greater part of this area. The remote parts of the other prairie provinces, however, have not been so fortunate in this respect. To me was assigned the duty of securing a first hand, up-to-date report of the present condition of this vast territory in connection with my work with the Natural Resources Intelligence Branch. After spending a month along the frontier or limit of agricultural settlement, I found myself in Edmonton about the middle of June preparing to penetrate the more distant areas.

It might be remarked here that by the term Northern Saskatchewan is generally meant the area lying north of the main Saskatchewan river, roughly about 125,000 square miles in extent; and by Northern Manitoba the additional area of 178,000 square miles granted to this province in 1912. The total area generally designated by the terms "Northern Saskatchewan" and "Northern Manitoba" is thus approximately 300,000 square miles. It is, therefore, evident that no exploration of any extent could be expected from a two months' expedition by a limited party.

This district, however, is not new. For over 250 years it has been known to the fur traders, both English and French, and the earliest discoveries and explorations were made in an inverse direction from that travelled by me, that is, they were made from east to west, while I travelled from west to east. One can sit in his library and make a comprehensive study of these regions from the many reports and stories published pertaining to their early romance. The district has also been fairly well covered by geological and other official parties whose maps and reports give a general history of the geological and physical features of the country and of its varied resources. Without having seen with one's own eyes, however, it is impossible for any person, no matter with what zeal he may pursue such fields of literary enlightenment, to obtain a proper conception of this wonder world or to catch the true spirit of its greatness.

It was thus to round out and put the finishing touches to my studies that I undertook to tread the mazy paths of wilderness, to meet the native Indian who still roams these districts in primitive style, and to emulate the fur traders of old as they conducted their brigades of canoes laden with a wealth of pelts from the Arctic divide to tidewater at Hudson Bay, there to meet the trading vessels from England. By such an experience only can be acquired that true grasp of the greatness of the district which enables one to assimilate and dovetail together in proper proportions, and with due credit, the many tales and reports, true or otherwise, which he meets in the pages of his library.

After due deliberation as to the best ways and means of procedure I decided upon the following course:—

To proceed from Edmonton to Fort McMurray by train, and from Fort McMurray easterly by canoe; taking with me throughout one white man as cook and assistant-companion-in-general, and relays of two native guides from post to post as required. The days of through trips are over. No more do the canoes of the French Canadian fur brigade set out from Montreal on their long and

arduous course half way across the continent by way of the Ottawa river, Lake Superior, and Lake Winnipeg to intercept the Assiniboias of the prairies. No more do the Athabaska brigades cross the long portage and follow the vacillating route of the Churchill, Saskatchewan, and Nelson to their headquarters at York Factory. Modern transportation has been a doom to these old routes as it has been to the stage coaches of old. The Athabaska furs now come out by rail from Peace River or Fort McMurray to Edmonton. The Churchill route is tapped from Prince Albert, The Pas, and by the steamers of Lake Winnipeg at Norway House so that through travel over these old routes is a thing of the past. Only the old guard know the way—the younger Indians can scarcely guide you from one post to the next. I had thought of the expedient of engaging an old Indian as guide, and even met one at Fort McMurray who claimed to know every foot of the way and every piece of dangerous water clear through to Hudson Bay. On account of his advanced age he hesitated to undertake such an arduous trip even though he was to act as guide only and be relieved of the heavy manual labours of paddling and packing. Of the younger Indians, one will not go alone; you must take two from post to post in order that your guide will not be left to return alone. As they must have a canoe for the return trip I dispensed with providing a canoe for myself and found it better simply to engage two guides with generally an eighteen-foot freight canoe which sufficed to take our party of four with all our equipment. This procedure was repeated from post to post as necessary and I think under the circumstances it is the most satisfactory way in which to travel these routes.

Before leaving Edmonton I estimated the date on which I might expect to reach La Loche portage, the long portage from the Clearwater to the head waters of the Churchill or from the Arctic to the Hudson Bay slope, and accordingly wired the District Inspector of Revillon's fur trading post at Ile a la Crosse to send a canoe and two men to meet me there on this date. Casting about in Edmonton to secure an assistant without infringing on the ranks of those who might be justly expected to answer the military call I found David Adams, an old acquaintance, who answered in every respect. Every inch of his bronzed and hardy six feet one a frontier's man, a roamer of the great lone lands since 1884, a member of the famous Royal Northwest Mounted Police for nine years, chef of various survey and engineering parties whose work extended even north of the Arctic circle, and with an enviable military record of service in the Saskatchewan rebellion of 1885, the South African war, and even the great war now happily ended, from which he had been returned on account of rheumatism after six months' service at the front, stood my old friend again ready for another chance to roam the northern wilds he knew so well.

A camp equipment, as limited as deemed advisable, and provisions sufficient to last through to Ile a la Crosse were purchased, packed, and shipped to the end of steel. With our tickets in our pockets, we had completed arrangements on Saturday the 15th of June and were ready for an early start Monday morning.

The Alberta Great Waterways Railway running from Edmonton northerly to connect with the steamers of the Athabaska at Fort McMurray was nearing completion, then being within some sixteen miles of its destination. Arriving at the Edmonton depot early on Monday morning of June 17, we entrained in the single battered coach attached to the rear of a mixed train loaded with all varieties of merchandise, stock, agricultural implements, railway equipment, and other accessories of a frontier district. A cosmopolitan crowd thronged the coach, construction men with their crews, farmers and home seekers, traders from the north returning with the proceeds of their fur sales, wives and children going to the new homestead, well-dressed ladies going north to visit relatives and see the country, here and there a school teacher, all thrown together in a motley throng intent on discovering what the future held in store for them in this new land. After considerable delay the train at last started north and

speeding for some forty or fifty miles over as pleasing a rural scene as the eyes could wish to see entered the more broken and sparsely settled fringes of the wilderness.

At every stop the scene now became the same. Each little nucleus of what may some day be a stirring town or city consists now merely of a rude general store over which the post office sign stands out in prominence and around which all manner of boxes and implements are scattered. Each received its little quota from the train. Swarthy sun-burnt homesteaders were on hand to greet their families or the less fortunate bachelor to view with envy such proceedings and perchance attempt to hide his real feelings with the excuse of looking for a hired man. No time was lost by these sturdy pioneers. Purchases were hastily loaded into the wagons ranged around the central store, while the new arrivals, with their baggage, could be seen climbing aboard and often before the leisurely moving train had once more gotten under way, the winding trails diverging from the little center had swallowed up the quaint procession and only the rattle of the wagon over the stretches of corduroy or the shouts of the driver who had not yet come to the point of replacing his oxen with horses could be heard growing fainter in the distance.

Night found us at Lac la Biche, a fairly prosperous pioneer settlement, chiefly French, on the shores of a beautiful lake surrounded by fairly heavy woods of spruce and poplar. This settlement marks the limit of any degree of active pioneering. A modern summer hotel has been erected on the shores of the lake added to which a number of summer cottages, the natural beauty of the spot, the excellent boating and fishing all tend to attract large numbers of holiday seekers from Edmonton. The soil of the district is good though the labour of clearing it is considerable, yet good progress is being made and a few years will see a flourishing agricultural section. Here we lost the remainder of our travelling companions with the exception of half a dozen traders and railroad workers. From this point on the "roughing it" began in many interesting forms.

Accompanying us to the end of steel was my good friend G. J. Lonergan, D.L.S., Inspector of Surveys, who was taking up an empty stock car to bring back government horses from the end of steel. We inquired from the railroad officials what time the train would continue on its journey and were informed that they expected to pull out any time about daylight. In this latitude and in the month of June daylight comes early, somewhere around three o'clock. We did not care to go to bed at an hotel and run chances of missing our train, neither did we relish the idea of sleeping in the one disreputable day coach. "Any port in a storm" is an old adage but none the less true, and in our extremity we cast longing eyes on our empty stock car. Confiding our ideas to the conductor, he willingly allowed us to move our possessions into this car. Having broken open a bale of hay and spread it on the floor and erected our mosquito tent to ward off the pest of flies and mosquitoes that would otherwise make sleep impossible, we spread our blankets and laid down to rest in perfect content in our side door pullman, quite satisfied that the train should start any time it pleased.

Early next morning it was under way. The track was rough and unballasted and the rails full of kinks and waves. Several attempts made to negotiate the first grade were successful only after the dew had dried from the rails. A few miles brought us beyond the last straggling habitation into the wilderness of spruce swamps and jackpine sand ridges which extend without interruption or break from Lac la Biche to Fort McMurray. From the first break of dawn until after the lingering twilight had faded we proceeded on our way and succeeded in making some one hundred and eleven miles. Twice the tender jumped the track and twice the crew put it back with perfect composure. During the afternoon the old coach trailing behind mutinied at going any farther over such a road and took to the ditch where in disgust it was left. The only break

in the monotony of the level swamp was at the crossing of the Christina river which flows through a grassy valley winding through these swamps. After crossing the river we encountered a land slide of mud, stones and small trees at the foot of the opposite bank. A halt was made and crew and passengers quickly cleared the track. The end of the day found us at mile 224; the end of the run of the Edmonton train.

A fresh engine appeared on the scene and after a brief survey of the situation the conductor informed us that it could only handle part of the load. The stock car was to be left behind temporarily. We therefore moved into an empty box car in which we continued our journey the next morning. Our progress now became slower and slower as the train crept over the flimsy skeleton of track floating on the muskeg. We put a number of the stops to good advantage by building fires at the end of the ties and making tea. In these repasts we were frequently joined by members of the crew and in this novel way banished our impatience. Night found us at mile 261.

The next morning it was reported that a sink-hole would bar our progress for the day. Our train backed down to mile 253 and waited on a side track while repairs were being carried out. All day long train loads of ballast were sent up and dumped in the hole only to disappear like water. Before night brush and poles were being substituted. Next morning our cars were pulled forward with a dinky engine and we had an opportunity of viewing the sink-hole. It occurred where the track passes between two shallow lakes on what appeared to be little better than a floating bog. Apparently when the frost came out the track simply sank. After some seven or eight cars of brush and long poles had been piled in, the ties and rails were again laid and the little engine ran across. The improvised track sank at least six feet and nothing but the holding together of the rail ends to form a suspension bridge enabled a passage to be made. A stop was made for dinner at mile 274, while the track ahead was being cleared of cars and at 3.30 P.M. the end of steel at mile 275 was reached.

At this point the right-of-way just breaks out from the wilderness of swamps on to the high and dry banks of the Christina overlooking its junction with the Clearwater. There still remain about sixteen or seventeen miles of track to be completed which follows along the southerly banks of these rivers and makes a side hill descent into Fort McMurray. The right-of-way has been cleared and graded over this remaining lap and the bridge crews were busy at work driving piles where several ravines cut through on their way to join the Clearwater. About the end of steel are clustered a few make-shift tents and stables and from this point all goods for Fort McMurray have to be packed or freighted down a steep and primitive roadway to the water's edge at the junction of the Christina and Clearwater, there to be transferred to water craft. An alternative wagon road leads directly through to Fort McMurray. We chose the former and Mr. Lonergan's packers and horses being kindly placed at our disposal we lost no time in moving down and pitching camp amid the large spruce and cottonwood of the Clearwater valley. At high water stage the Athabaska steamboats manage to come up the Clearwater to this point, and here we found large stores of goods waiting for shipment to northern points.

We awoke next morning to find it raining and rain continued to fall nearly all day so that we did not venture far from camp but contented ourselves with examining the valleys of the Christina and Clearwater in our immediate vicinity. The woods in the flats and on the hill sides are fairly heavy. Some good spruce is found but the greater quantity consists of cottonwood which is of an inferior quality. Small areas of hay and grass were seen but both good timber and agricultural land are very limited.

We also found time during the day to sum up our individual impressions of the district we had just passed through north of Lac la Biche, to compare notes and try to arrive at a just verdict. For this distance and to a depth of fifteen

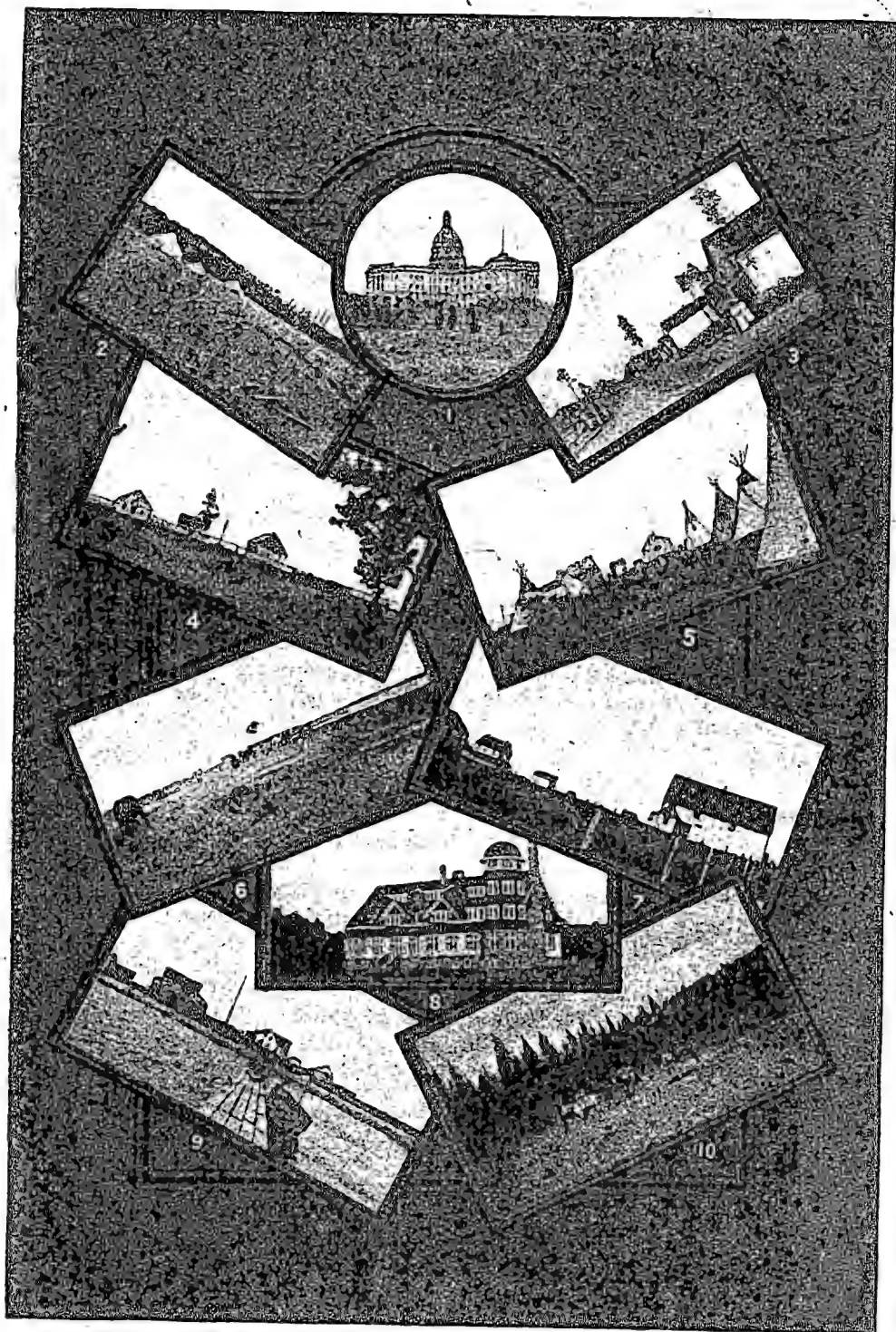
miles on either side of the right-of-way the land has been reserved for soldiers' settlement. Both Lonergan and Adams have spent the greater part of their lives roaming over every part of Western Canada while during the past twenty years I have seen considerable of it myself, and we were of the unanimous opinion that in its present state this strip of land is totally unfit for the purposes suggested. "What military offence did I ever commit," said Adams, "that I should be banished to these swamps? I would rather face a firing squad." We believe however that the land is good. Along the right-of-way, which is drained by a ditch on either side, a most luxuriant growth of wild hay is to be found. In fact at the time we went north it had already completely covered the ties and rails so that the train appeared to be simply sailing through a long meadow. As a reclamation project this reservation offers promising possibilities though to an individual the task of making a farm is rather hopeless. The reclaiming of the area should be prosecuted hand in hand with the building of the railway, thus opening up the country in keeping with the extension of steel, and vice versa.

On Sunday, June, 23, a number of passengers arrived by motor launch from Fort McMurray to entrain at the end of steel for Edmonton. Leaving Adams to guard the camp—from dogs—I accompanied the owner of the launch on his return trip to Fort McMurray. Here one finds but little sign of advancement though from the highly coloured descriptions of various interested real estate agents I had expected to see a veritable young city springing up. The old Hudson's Bay post, nestling at the foot of the high banks and surrounded by a picturesque group of Indian lodges, is still the centre of this metropolis. The boats for the north had departed, the Indians had been paid their treaty and now all was quiet. It was even with difficulty that I managed to secure transportation up the Clearwater. Canoes were scarce, and canoe-men scarcer. I finally arranged with a Norwegian and an Iclander to make the journey as far as the rapids by motor boat and thence by canoe. Having completed these preliminaries and secured a few pictures and all the information available of this historic spot, which no doubt in a few years will develop into an important transportation town, I returned to my camp to make ready for the second stage of our journey or the first stage of the canoe part of it.

Fort McMurray to Ile a la Crosse.

The Clearwater river is navigable by light-draught steamers from its mouth at Fort McMurray up as far as the confluence of the Christina, a distance of some twenty miles. The steamers plying on the Athabaska frequently make trips to this point to make closer connection with the end of steel, though when the rails are laid to their destination navigation on this section will probably be abandoned. The current is fairly strong as I found on Sunday evening when returning from Fort McMurray to my camp at this rendez-vous. The small motor boat engaged for the Clearwater trip made good time on the run though it was dark and very cold before we saw the welcome glow of our camp fire's dying embers. I set out early next morning, June 24, with my cook Adams and two men I had engaged for this part of the trip, travelling in the motor launch and with a canoe in tow.

The Clearwater from the mouth of the Christina up as far as the foot of the Cascade rapids, a distance of some forty-five miles, is a fairly well-drained river with a rather strong current. In places there is swift water which makes navigation against the current rather difficult though it can hardly be described as rapids. The river winds a rather erratic course through a wide valley of clay and sandy loam flanked by sloping hill-sides, some two or three hundred feet high. Many patches of good spruce are to be seen in this valley, but I think their extent has been rather over-exaggerated. The valley and hillsides would make



1. Legislative buildings, Edmonton.
2. End of steel, Mile 275 A.G.W. Ry.
3. Main street, Fort McMurray.
4. Hudson's Bay post, Buffalo river.
5. Indian encampment, La Loche lake

6. Horses and cattle grazing, Ile à la Crosse.
7. Hudson's Bay post, Ile à la Crosse.
8. Summer hotel, Lac la Biche.
9. Revillon's post, Ile à la Crosse.
10. Packing over La Loche (Methye) portage.

good grazing land with a certain amount of clearing, and the flat land adjacent to the water might make good farms though possibly exposed to the danger of inundation during the high water stages.

At this date the river level was high, covering the bars and beaches, and reaching up to the roots of the rank growth of willows which overhung the bank nearly all the way. For mile after mile their drooping branches were swept by the high waters giving a most pleasing effect of waves of verdant swaying in unison with the rippling waters of the river. The aesthetic effect, however, was lost on the up-stream paddler who saw in it only a barrier to poling and a swallowing up of his favourite tow-path, thus forcing him to find his way up stream by sheer force of strenuous paddling. Our little motor boat proved a real find and made without difficulty the foot of the Cascades rapids by seven o'clock in the evening. Here we made camp on a jackpine ridge above the first piece of rocky shore noticed.

There is little to interest the traveller on this part of the river. At noon we had fallen in with a couple of prospectors and about four o'clock in the afternoon a cow-moose and calf gave us a few moments entertainment by swimming the river a short distance ahead of our boat. Two or three beaver were also seen swimming and about five miles below the Cascades we stopped for a few minutes to examine some sulphur springs on the right bank of the river.

Next morning we awoke to find it raining, but nevertheless proceeded with the canoe leaving the motor boat moored below the rapids till her owners returned. We were at once initiated into the inevitable "packing" as a diversion had to be made around the Cascade rapids. Here on the right limit of the river the traveller meets his first portage to be followed by many a weary one, some long, some short, some wet, some dry, some level and some hilly, before the waters of Hudson Bay are reached. This first one breaks the ice gently being only about half a mile long, well cleared out, dry, smooth, and fairly level. We promptly shouldered our packs and started off on the grind pondering as to the thousands of feet that had trodden this path so smooth during the past two centuries. Our guides expressed considerable surprise at the weight of the packs Adams and I loaded ourselves with though we had judged them very moderate. It appears, however, that this was their first experience with travellers who made any serious attempt to assist in the labours of transportation. Your ordinary tourist considers himself loaded down if he carries across a portage a kodak and a kit bag with a few personal or toilet articles therein. If by chance a gun or a fishing rod should be added he considers himself loaded right down.

During the day we had five sessions of this exercise. Following the Cascades portage was a short one of about one hundred yards, also on the right limit, then a few miles up stream another one on the right limit, this time about a mile in extent, but dry and sandy, well-cleared out to a width of about eight feet and easy to negotiate. Then comes Big Stone portage on the left limit, about one quarter of a mile long, and also good walking. Three or four miles paddling up stream brought us to Portage du Pin on the left limit. This portage runs over a high sandy ridge and through a range of limestone cliffs for about half a mile. Several of these cliffs have perpendicular faces in which are cavities leading into the depths of extensive caves. Old legends say these were at one time the haunts of cave men or cliff dwellers and I would fain have spent a day in exploring some of them but time would not permit. Camp was made in the rain and in spite of sultry weather and swarms of mosquitoes a restful night was spent. No doubt the five portages had something to do with this.

At 7.30 next morning we were on the move again in a steady drizzling rain. Another portage of about half a mile on the left limit and a few miles paddling brought us to the foot of the White Mud Falls and Canyon. Here the river rushes and foams through a narrow canyon cut through a limestone ridge. Considerable power is available at this site and it could be easily harnessed. The

portage around the canyon is on the north shore and winds up over quite a high and rocky hill. Almost immediately above this is "Dead-man's Point" portage on the same side. On this portage some fine specimens of white spruce and birch are to be found. At the upper end is a large sign reading "Stop — Danger — White Mud Rapids."

At noon we crossed the Fourth Meridian, the boundary line between Alberta and Saskatchewan, being the 110th degree of West longitude. The line is well cut out and can be easily observed from a canoe. We had lunch here, in Saskatchewan, and proceeding up stream through a drizzling rain and clouds of mosquitoes arrived at the long portage or Portage La Loche at 5.30. After a hasty cup of tea our guides departed with their canoe bent upon returning to their motor boat that night. Adams and I hastened to pitch our tent and escape from the deluge of rain and mosquitoes.

Two days were spent at this end of the portage and another day in crossing it. After the rain had subsided we hunted up a couple of young Indians who were homesteading in the vicinity and arranged with them to pack our supplies across the twelve-mile portage with their ponies. It was over this trail that for long years the fur trade with the far North was carried on. Here the brigades of the Athabaska were met by the brigades of the east and the arduous toils of the voyagers were made light by the revelries of the yearly reunion. The Clear-water flats at the upper end of this portage are open and grassy and make excellent ranching lands on which the Indians now have a few cattle and ponies. Going south the trail soon begins to rise and for about a mile the ascent is steep and the hillsides are heavily wooded until the height of land is reached. Here the soil becomes sandy and stony. A number of shallow lakes are found and the woods consist of stunted jackpine and birch. This marks the divide between the Mackenzie and Hudson Bay slopes. The southerly end of the portage approaches the shores of La Loche lake through a low swampy flat with occasional patches of dry grassy land. At one time freight teams and wagons operated over this trail and broken down vehicles are to be seen discarded here and there along the route. At present the traveller may have his goods transported by pack pony or ox-team by Indians living on the north west shore of La Loche lake.

We arrived at the south end of the portage at five o'clock on the evening of the 29th of June and found two Indians with a canoe from Ile a la Crosse awaiting us. Quickly shifting our goods from ponies to canoe we struck across the end of the lake and made camp beside the Hudson's Bay Company's post on the west shore. Here we were royally received by that veteran trader Angus McLeod, thirty-six years with "the Company" and still going strong. I was anxious to see his garden as many maps and reports credit this district with remarkable results in vegetation. Accordingly the garden was shown me and while it is true that numerous varieties of vegetables have been successfully grown and even barley has been ripened, such feats appear to be the exception rather than the rule. For instance the Hudson's Bay garden here consists of an uncommonly favoured spot containing about a quarter of an acre of soil comprised of swamp loam and sand washed up from the lake. It lies on a point exposed to the south and well-drained, but it appears to be about the only spot on the lake so favoured. Though this was the 29th of June we were quite content to finish our evening's chat around a rudely constructed fire place of stones and mud in the residence house where a pleasant fire dispelled the chill of evening.

Next day being Sunday and our Indian canoemen being desirous of attending service at the mission adjoining Revillon's post on the east side of the lake, we set out and crossed this body of water in the forenoon. La Loche lake is shallow and sandy, the surrounding country is flat and the whole aspect is dull and cheerless. Arriving at the mission we found that a couple of priests from Lac la Plonge were here conducting a series of services extending over a period of

two weeks, and the Indians from the whole country-side to the extent of two or three hundred were gathered in attendance. Row after row of tepees lined the beach or clustered about the few wooden buildings of the post. The entire families had come from far and near bringing all their worldly possessions with them and the place was alive with children and dogs.

A storm broke shortly after our arrival compelling us to make camp and to remain with this community until the evening of the next day. This enforced sojourn among these people gave us an excellent opportunity to get acquainted with them and study their habits and manner of living. They belong to the Chipewyan tribe, which, with the Crees, inhabit nearly all of northern Manitoba and Saskatchewan. For two days I listened to a continuous outpour of hard luck stories. No doubt these poor natives are hard put to for a living. The country is decidedly poor and game is growing scarcer every year. During our stay they appeared to be subsisting entirely on a diet of jack-fish, each family having their nets spread some distance from shore. When the storm lashed the lake into a foam making it impossible for a canoe to reach the nets the poor Indian postponed his dinner to await the coming of calmer weather.

They seemed intent on informing me of the hard times they were enduring, as if I could alleviate their distress. The little tots hung about my tent and greedily gobbled up the scraps the cook threw them. I would fain have given them a feast but my stock of provisions was sufficient only to take me through and would not have lasted that band five minutes. Before leaving I was convinced that they were almost on the verge of starvation and also that their own improvidence was responsible for it. Moose were getting scarce, they told me, yet they are too lazy to keep cattle. Supplies were scarce and very expensive, yet for two weeks in the spring of the year they could hang about the church in idleness while the few odd thrifty families remained at home and planted little gardens. Far be it for me to belittle the zealous work of these missions but one cannot help feel what the Indians need is a good live instructor delegated with sufficient authority to make them get out and hustle for six days out of the seven. The resources of this district, however scanty, are sufficient to meet the requirements of the few small bands of Indians located there, if properly utilized.

The storm having somewhat abated, we left at 5.30 P.M. on Dominion Day and hoisting a sail quickly made the foot of the lake. Here the sluggish La Loche river winds and twists a most tortuous course through the swamp and reeds lying between La Loche and Buffalo lakes. For hours we paddled along through as dismal a muskeg swamp as I had ever seen and it was not until 10 o'clock that we reached a ridge of sufficient prominence to permit of camp being made on a dry elevation. By noon the next day Bull House on the northerly end of Buffalo Lake was reached. The Hudson's Bay and Revillon Companies both have warehouses here but during the summer months they are closed up. Skirting the west shore of Buffalo lake we were forced by another storm to make camp early in the afternoon. A few Indians are located in this district and on a large meadow near our camp I saw a number of good horses. The next day the storm abated in the afternoon leaving us time to cross the lake to the small Chipewyan village of Buffalo River where we camped for the night. This village is a decided improvement over ~~that on La Loche lake~~. A fairly good class of log houses is to be found, also several gardens, and some good cattle. A church and burial ground are located on a high point overlooking the lake. The Hudson's Bay and Revillon Companies both have posts here and the settlement appears in a very prosperous condition. Fishing the year round, trapping in the winter, freighting when freighting is to be had, and with their cattle and small gardens well attended to these people live and thrive.

Strong winds prevented our departure until 3 o'clock the following afternoon. Sailing across Little Buffalo lake we met a gasoline boat with two small scows loaded with supplies for Bull's House. The shores now began to get a

little higher and the woods of a bigger size, the water also appeared deeper and bluer though darkness overtook us before we stopped to make camp at The Narrows leading from Little Buffalo lake into Clear or Churchill lake. Here a band of Indians were camped fishing and their dogs kept up a continuous howling throughout the night so that we were glad to get away early the next morning.

Clear lake is well named and with its high banks and numerous islands presents a pleasing vista after the dull yellow waters we had traversed. The weather now improved, the sun coming out bright and hot, and only a light breeze blowing. Circling around the lower end of Clear lake we entered a long narrow arm leading to Ile a la Crosse lake and had the pleasure of meeting some members of Mr. Blanchet's survey party who were mapping the shore lines in this vicinity. Following down Macbeth channel the banks began to get higher and were covered with myriads of tiger lilies in the height of bloom. The soft muskeg shores of the northern waters now gave way to sand and stones and the stunted spruce and tamarack to poplar, birch, jackpine and white spruce of good dimensions. The level of the surrounding land is about 50 feet above the water's edge.

When about fifteen miles north of Ile a la Crosse fishing camps were seen. In the winter time large numbers of whitefish are shipped in a frozen condition from these lakes to the end of steel at Big River, the terminus of a branch line from Prince Albert. A number of porcupines were observed leisurely winding their way along the shore. Rounding a point we suddenly came upon a black bear which hastily retreated into the woods. Evening was well advanced when the picturesque northern village of Ile a la Crosse loomed up in the twilight and at half past ten we landed at Revillon's Wharf and were given a warm welcome by the District Manager and conducted to quarters made ready for our reception while our Indian canoemen lost no time in returning to their homes near by.

The next day being Saturday was devoted to preparing for the third stage of the journey, which was to take us as far as Lac la Ronge. This was followed by a well-earned day of rest on Sunday, thus giving us quite a stay at this interesting northern village and providing a splendid opportunity to note its peculiar attractions. The history of the fur trade intimates that a trading post was first established on an island at this point by Benjamin Frobisher about the year 1777; and that the name was derived from the Indian game of lacrosse which he here witnessed. The site of the present village, however, is on the mainland though the ruins of old Fort Black are to be found on an adjacent island, thus verifying these old reports.

The village, as found on my arrival, consisted of the Hudson's Bay and Revillon's trading posts, one independent store, an idle sawmill, a large Roman Catholic church and Indian school, a number of Indian houses and a pool room. The white population consisted of about a dozen souls while the Indian population was principally of a transient nature. Whole tribes of natives come to the village from time to time to dispose of their furs and make their purchases. Their visits are frequently extended to a couple of weeks' duration and considerable merry-making is interspersed with business. This village is the distributing point for a very large area and the volume of business transacted is astonishing. Goods are brought from Prince Albert, by rail as far as the end of a branch line at Big River, thence during the summer time by canoe down the Beaver river. In winter time freight sleighs operate between the village and the end of steel over a new colonization road recently opened up by the Saskatchewan government, but this road is still in poor condition for summer travel.

During the winter of 1917-18 over 3,000 boxes of frozen whitefish, weighing from 150 to 200 pounds each, were shipped out, together with several thousand dollars worth of fur. The Indians not only caught most of this fur and fish but also did most of their own freighting. They own a number of horses and cattle

and cultivate gardens in various select localities. In these agricultural endeavours they benefit by the advice and assistance of the mission, which conducts a very successful farm. Potatoes are very successfully grown here and many other varieties of garden vegetables make creditable showings. The natives mostly belong to the Chipewyan tribe though a few Crees are to be found. Both tribes are said to be fairly expert hunters and fishers and do very well when they can be kept at work, but their inherent tendency to loaf is always in evidence. Improvidence is one of their great faults. When they have money they cannot save it, but squander it in most foolish purchases or dissipate it in gambling, to which they are most universally addicted.

At the Hudson's Bay post I met another of their veteran traders in the person of J. J. G. Rosser, 33 years with the Company and an absolute authority on Indian customs. Revillon's post was under the direct charge of their district inspector, Del Simonds, who, though younger in both years and experience, was nevertheless keenly alive to the opportunities of his position. The success he was attaining was already exhibiting itself in the new warehouses that were being erected under his direction during my stay and which were to double the capacity of the old post. One face I recognized when the district fire ranger came in sight, for he proved to be John Coleman, an Edmonton "old timer" whom I had known fifteen years ago when I lived in that city. He proudly exhibited a pair of German field glasses he was using. They were captured from an enemy officer and sent to him by his son. The village had been linked to the outside world in 1912 by a telegraph line built by the Dominion government. It runs from Battleford almost due north to this point and is 275 miles in length. We were thus enabled to get some news of the happenings of the world and were particularly gratified to hear good reports from the front. It was about this time that the allied armies commenced their great drive that was so speedily to bring the enemy to his knees.

The weather continued fine during our two days' visit and the village was alive with many dusky visitors. On a large open flat games of football and baseball continued almost incessantly, while the noise of hammer and saw from the new warehouse under construction, and the lowing of cattle about the mission gates, gave a touch of life that made one forget his isolated location. The accommodation at the post was also most opportune. It was the happy medium between the privations of a wilderness camp and the completeness of a modern hotel. A desk to write at, a table to eat from, a chair to sit upon and floors under foot were most enjoyable luxuries after the cramped quarters of a small tent, while the absence of conventionality in dress and habits left the sun-burned and wilderness-strange traveller entirely at his ease. The sudden plunge from the wilds to the drawing-room may cause a consciousness of shortcomings resulting from an association with the primitive, but the quarters of the post provided all the comforts without the embarrassments. The long table with its red cover heaped with dainties of the post and the choicest fruits of the chase, the oil lamps glowing along the walls, the fire crackling in the grate, the softly-treading cook in beaded moccasins with hat tilted on back of head and cigarette between lips, ever replenishing the plates, and the hilarious tunes of the post gramophone in an adjoining room filling in the pauses of merry table-talk gave to these entertainments in the rude northern trading posts a charm of novelty that cannot be found in more prosaic centers of civilization.

Ile a la Crosse to Lac la Ronge.

Early next morning we bid farewell to our newly found friends and set out for Lac la Ronge with an eighteen foot Peterboro freight canoe and two fresh Indians. The weather was calm and very hot, the lake lay before us like a sea

of silver and the Indians bent to their paddles with a vigour that surprised us. A stop was made for lunch in a pretty little bay where the hillsides slope gently down to the water's edge. Another stop was made for tea at four o'clock on a sandy point reaching out into the lake, after which a light breeze sprang up enabling the weary canoemen to hoist a sail and snatch an hour's rest. At sunset we had reached the end of Ile a la Crosse lake and felt the force of the current as our canoe was drawn into the rapids of English river, as this section of the Churchill is called. A few moments of thrilling run and the canoe shot into the quiet waters of a small lake where we camped on a grassy bank.

On the opposite shore was a camp of about one hundred Indians with innumerable dogs whose howling continued without interruption during the night. We soon had several visitors, both Indians and dogs, and now we understood the unusual haste of our canoemen during the day. It was to reach this point that they exhibited such surprising speed, but the satisfaction of having covered a forty-five mile run was marred by a night of unceasing noises. The rapids between these two lakes make an excellent fishing ground, the surface of the water being literally alive with the backs and fins of innumerable whitefish.

This lake is a favourite rendez-vous for Indians from the far northern parts of the province. Once a year they gather here for trade, sport, and religious ceremonies. Outposts of Ile a la Crosse intercept most of the business though a few Indians continue through to the main post of this village. During the evening manager McDonald of Revillon's outpost paid us a visit and entertained us with narratives of his trading experiences. The Indians now camped on this lake were all Chipewyans, most of whom had come from Cree lake, though a few belonged to Fond du Lac at the eastern end of Lake Athabaska. They were all now making preparations to return to their hunting grounds, and for another year this camp would be deserted.

In the early days of fur trade the English and French both allowed the Indians to bring in their offerings to headquarters. Rivalry soon resulted in emissaries journeying out to meet the Indian and lure him from his usual route, or even to barter with him in his own territory. This process has now been carried to a fine extreme. Not content with waiting for the Indian to make his annual visit, even to the most outlying post, the rival companies send scouts right into his hunting grounds during the height of the season. These scouts are to-day the real coureurs-de-bois of the fur business. In the depth of winter they set out with a dog train and a small stock of such supplies as they deem will appeal with greatest envy to the native, such as tea, tobacco and sugar. Striking across the unbroken wastes of wintry wilderness they push on to the camps where the Indians have established themselves for the winter's hunt. Travelling all day on snowshoes breaking trail for the dogs with their heavy load, sleeping by night in the snow, sheltered only by rocks or clumps of spruce, and in constant danger of becoming lost or frozen amid sudden storms, these intrepid agents of the post traders vie with each other in securing the choicest of the catch as the harvest of furs is being reaped. This method of advanced trading is known as "tripping out" and calls for the greatest endurance and courage.

We left camp early next morning, crossed the lake, and by ten o'clock could distinctly hear the warning roar of Drum rapids, the first of many magnificent cataracts to be encountered along the Churchill. A short portage on the right bank was necessary here after which several smaller rapids were run without mishap, though considerable water was shipped. A stop was made at eleven o'clock for lunch and to dry our baggage. The shores here were covered with a rank growth of grass. Ledges of rock and large boulders made their appearance along the rapids.

Continuing our journey we soon reached Dipper rapids where the water rushes and roars through a narrow rocky channel about one eighth of a mile in length. The portage follows a high rocky bench on the north shore and out-

crops of granite occur in massive ridges. A short distance below the rapids is Dipper lake, a long narrow body of water extending on either side of the river and at right angles to it. On a high rocky island a short distance from shore, where we landed on account of rough water, were a number of Indians camped and cultivating a small patch of potatoes.

We also met a number of Indians starting out with a fresh stock of supplies for another season's hunt. In this band was one old woman-hunter whose husband had died several years previously. She was said to be equally capable to the men and maintained her husband's reputation in providing well for her family. When the Indians bestir themselves, gather together their supplies and bid farewell to the idle life about the post and again take up the strenuous duties of hunting they are said to be "pitching out". If they are known to be good hunters and show a desire to pitch out, they are readily given ample advances in the form of necessary supplies by the traders, on credit, which is known as "debt". Very few show any inclination to evade their obligations and their first act on returning the following year with their season's catch is to liquidate this debt. Values are still quoted to a certain extent in "skins". No specific skin is now designated; the term simply denotes a value of 35 cents, or three skins to the dollar.

The weather having grown calmer, Dipper lake was crossed in the evening. A number of pelicans were noticed on this lake. The next day was hot and sultry and we continued our journey with a plodding persistency, sweltering on the portages, dazzled on the lakes by the brightness of the sun, snatching a well-earned rest when fair winds made sailing possible, and landing for meals with frequent regularity. Much has been written about the endurance of the Indian but from my experience with them I find that their endurance falls far short of a white man's. After three hours they show signs of lagging and are absolutely useless if meals do not come at least every four hours. In travelling their chief occupation is "boiling the kettle". The task of feeding them kept Adams almost in despair, yet we realized that the habits of ages could not be overcome in a few days and our only course was to humour them by frequent stops for lunch. To overcome this loss of time we tried to make long days of our travels, frequently breaking camp at seven in the morning and not making another one till nine or ten at night. In this way a fair day's travel could be accomplished, though we found it hard to accommodate ourselves to these unusual meal hours. The average white men, in two shifts of five hours each, would cover as much ground as the Indians do in three shifts of four hours, would save the trouble of preparing an extra meal, and would allow themselves longer leisure in camp. However the line of least resistance under such circumstances as ours was to adapt ourselves to the custom of the country.

Portages were made around Crooked and Elbow rapids though the latter can be run by taking a course on the right side for about half way, or until the cascade on the left is passed, then crossing in mid-rapids and running the balance on the left side. Camp was made at the mouth of a river locally known as Pine, but shown on the map as Haultain. It is up this river that the Indians from the far northern lakes pursue their homeward journey.

Immediately below this point are found very extensive flats, partially flooded, covered with a most luxuriant growth of very tall hay. The river breaks up into numerous branches which wind most mazy courses through these meadows. Thousands of brilliantly coloured marsh-birds are found here. On a slight rise of ground some old trading posts were visited by us as we passed this way the following morning. Several of these log houses had stone fireplaces and roofs thatched with a combination of hay and mud. In the afternoon of this day, July 14th, we experienced an exciting sail across a lake about ten miles in width. Setting out with fair wind to cross it we were quickly overtaken by a violent thunder storm. The surface soon assumed considerable proportions, white

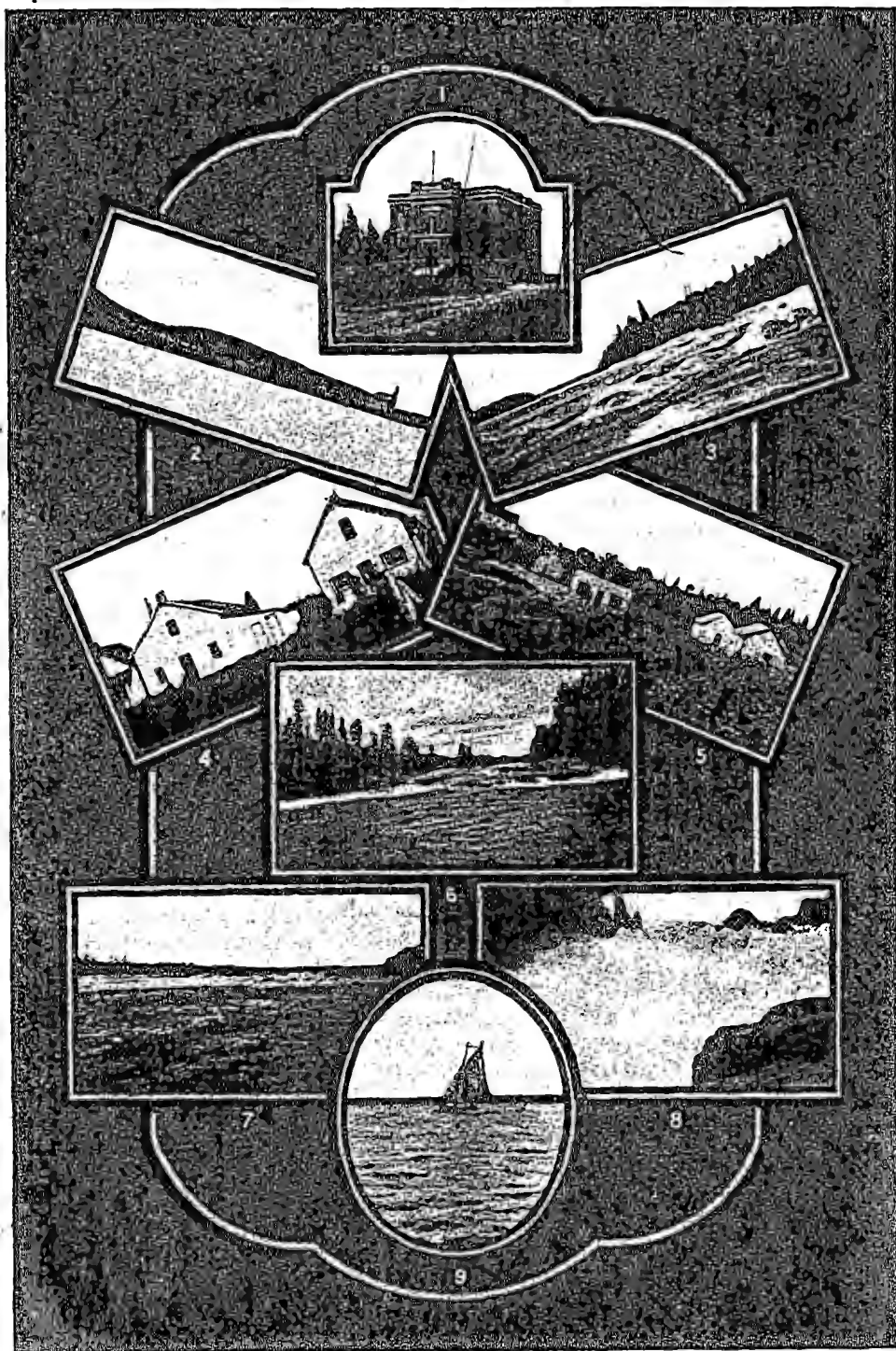
caps appeared everywhere and our little canoe scudded before the gale with wonderful speed. It proved itself a right good craft and we landed safely at the head of Snake rapids where we camped for a day and a half until a series of storms abated.

Near by was a camp of Crees which our canoemen early visited. During our stay here the younger of my two canoemen came to my tent, and, after much beating about the bush and apologizing for troubling me, let me know that a "little game" was in progress at the Cree camp, that one Indian had eighty dollars and that if I would be so good as to advance him a few dollars on account of his wages he would be delighted to secure a slice of this Indian's pile. It was useless for me to caution him so I advanced him ten or twelve dollars and off he went in great glee. I knew on his return what had happened, but said nothing until after we were well on our way below Snake rapids when I asked him how he made out. "Lost everything," he muttered. "I suppose that Indian will have about one hundred dollars now," I remarked. "I suppose so," he admitted gloomily, while the cook rocked the canoe with peals of laughter.

Now we were on Snake lake, a beautiful body of water surrounded by high hills of red granite partly covered by groves of deep green jackpine and silver birch, and dotted with innumerable picturesque islands varying in size from mere points of rock to beautiful areas upwards of half a mile in length. The waters are clear and apparently very deep. Fish appear very plentiful everywhere along the route though we had seen but little game or waterfowl. Instead of following the Churchill, my guide now proposed that we strike across from Snake lake to Lac la Ronge by a route leading through a chain of large lakes, which he claimed was not only shorter but would avoid several long portages the rapids of the Churchill made necessary. I was glad of the change and accordingly we took this alternative.

Leaving Snake lake on the 14th we travelled for three days through as beautiful a lake country as the eye could wish to see and reached Lac la Ronge on the evening of the 16th. One old hunter describes this part of Saskatchewan as a "sea of islands" and I do not know of any better description. Once or twice I climbed to the top of a rocky prominence and with my glasses scanned the horizon in every direction and this was exactly what I saw. Sometimes our route followed winding streams through grassy valleys hemmed in by high cliffs of granite and waving trees, and where the sluggish waters were covered with myriads of golden water lilies. Sometimes we crossed lakes, winding in and out through countless islands, and we pictured the scene as it would be were these set off by summer cottages. Lazy pelicans slowly flapped their great wings and sailed away at our approach, loons screeched their weird cries on all sides and save for these notes of discord and the splashing of fish only the sighing of the wind through the tree tops broke the stillness of these solitudes.

On this mazy route, without a guide, one might lose his way and spend weeks in trying to get out, so intricate is the way. My guide had only travelled this route in winter time, and five years ago at that, so that it taxed his skill to the utmost in choosing the proper course. Even at that I doubt if he would not have made a few mistakes had not that veteran native fire ranger John Flett, whose patrol we were now following, marked out the way by a series of signs and signals which I was able to follow myself. Only a few short portages had to be made and all were well cleared out and beaten smooth. On one of these I measured spruce and balsam trees with diameters up to sixteen inches at four feet from the ground, though the amount of large timber noticed was not great. On another portage we found some ripe strawberries. Flowers were everywhere plentiful and the woods almost entirely green, very small burnt areas being noticed. This beautiful route culminated on the evening of July 16th when we reached the great Lac la Ronge, the most majestic of them all, beautiful beyond description and dotted with countless islands that fade away into the distance of the



1. Community building, The Pas.
2. North shore, Churchill river at Stanley.
3. Rapids on Churchill river below Stanley.
4. Hudson's Bay post, Lac la Ronge.
5. Pelican Narrows, Hudson's Bay post in foreground.

6. Scooping rapids, Sturgeon-Weir river.
7. Dipper rapids, Churchill river.
8. Falls on Rapid river.
9. Fishing boat on Sturgeon lake.

purple horizon. Skirting the west shore of this lake, we struck out for the post at the south westerly end, and though darkness overtook us we kept on our way as the last of our provisions had been consumed at the evening meal and we looked to the post to supply us with breakfast. At midnight the welcome lights were seen and camp was pitched on a grassy spot between the shore and Revillon's post buildings.

One day was spent at this interesting outpost of civilization, and many more could have been spent with both considerable pleasure and profit, but circumstances compelled me to hasten on my way. As it was, the fleeting hours were put to good advantage and I managed to get a hurried glance at the various points of interest and to make a careful estimate of the resources of this district. Lac la Ronge is connected with Prince Albert by a canoe route following Montreal river and Montreal lake, thence by a rough wagon road for the remainder of the distance. It is a hard and tedious route, consequently the necessary supplies are freighted in with considerable difficulty. A contract had been let the preceding winter to a newly organized fishing company of Prince Albert for the transportation of nearly all the goods required at this point. The company hoped to carry on an exceptionally profitable business by freighting supplies one way and fish the other. Like many another well-laid plan their hopes proved futile. Things had gone wrong and on our arrival we found that nearly all the goods ordered by Revillon's and the English mission lay scattered along the route and strenuous efforts were being made to get the Indians of this district to rescue them by canoe.

A new manager, A. Honour, had just arrived, with his wife and two little boys, to take charge of Revillon's post and they were in the throes of getting settled. In spite of these handicaps they insisted on entertaining Adams and myself at dinner, and before our departure Mrs. Honour found time to bake us a number of excellent bannocks. In the afternoon I made a visit to the Hudson's Bay post, which is located on the opposite side of the bay and about three miles distant from Revillon's post and the English mission. Their post here is in charge of another old-time "company man", Angus McKay. He pressed me urgently to extend my visit over night but I reluctantly had to refuse. Fortunately his post was fairly well stocked with supplies and I was able to replenish my commissariat.

This post is very pleasantly situated on a sheltered arm of the bay and on a gently sloping hillside about a hundred yards from the water's edge. The surface here consists of a sandy clay, lightly wooded. On the south side of the post residence a patch has been cleared and walled in for a garden. McKay proudly showed me his horticultural exhibits, and indeed he had reason to be proud of them, as this garden was one of the beauty spots we had seen. Pansies and other flowers were in bloom. Potatoes were well advanced, tomatoes were in bloom, onions, cucumbers, citrons, celery, squash, radishes, lettuce, cabbage, cauliflower, Brussels sprouts, peas, beans, carrots, beets, turnips, corn, and sunflowers were examined in the order named and were all found to be doing wonderfully well, especially the onions. Tomatoes, he informed us, ripened on the vines, while celery, cucumbers and table corn were always had in plenty. Citrons had not yet matured but he hoped to succeed this year. Between his house and the lake was a heavy crop of bromé grass. The location of this post is ideal and I was loath to have to hasten away.

Returning to camp I had just time to walk to the English church mission near by to keep an appointment with the Rev. C. F. Hives, who has been in charge of a mission and Indian boarding school at this point for the last three years. After tea we were shown over the establishment which consists of a church, boarding school for treaty Indian children, sawmill, stables and garden. Two horses, two cows and some poultry are kept. A large garden on the lake shore showed satisfactory signs of advancement and about a quarter of a mile

inland an area of four acres of spruce muskeg has been cleared up and drained at a cost of \$250 per acre. The soil is a deep, black, vegetable loam, on muck. What is cleared had been permanently frozen to within eight or ten inches of the surface. This land is still too cold for the growing of vegetables but raises excellent crops of hay. In this district there are many thousands of acres of such muskeg which could be brought under cultivation, and possibly if larger areas were exposed to the sun and wind the ground would obtain a greater degree of warmth thus enabling grains and vegetables to be grown with equal success to that attained on those exposed garden areas facing the lake.

Foxes and other wild animals prey heavily upon the ranks of the poultry. A novel idea for the protection of the latter was adopted by keeping a pet bear within their yard enclosure. Knowing the Indians' tendency to hang about a church if there was any work in sight, I questioned the good missionary on this subject and found him keenly alive to their tricks. In answer to a question of mine he replied, "I hold church services on Sundays only and tell them to get out and rustle during the rest of the week the same way I have to do myself." During that night a violent thunder-storm raged and my Indians, together with some natives of this lake, spent the time in another "little game", in which one unfortunate player parted company with a rifle I had seen him purchasing that afternoon at the Hudson's Bay stores.

Lac la Ronge to The Pas.

The next morning we bid an early farewell to this interesting settlement and headed north-easterly across Lac la Ronge and by a chain of small lakes and four portages to the Churchill river, which we again entered the following forenoon, a short distance above Stanley. By noon we had camp made at this historic place. Here we spent the balance of the day. This was the destination of my Ile a la Crosse Indians and they appeared quite willing to return without delay, having now been absent twelve days, which is a long time for an Indian to be away from home. Tom Bear, native trader in charge of the Hudson's Bay post on the south side of the river, promptly supplied me with a fresh relay to go as far as Pelican Narrows. In place of our usual large canoe nothing was available but a couple of small sixteen foot ones. In one of them I paddled with one Indian, while Adams and the other Indian took the second.

On the north bank of the Churchill is here found a very historic and picturesque church of England edifice which was built some sixty-five years ago by a devoted English missionary at his own expense. The interior woodwork and fittings were all imported from England, as well as the windows, every pane of which is stained glass. This material was shipped to York Factory and brought up by canoe from there. The exterior woodwork and the shingles were whip-sawn by the Indians from logs cut in the vicinity. The church stands on a rocky point projecting into the river. In the background the high rocky banks rise to a height of several hundred feet and are capped by a 35-foot tower built by the fire rangers as a lookout station. Rounding the bend in the river, this scene had suddenly and unexpectedly burst into my vision, and I thought it was the most striking sight of my summer's travels.

Revillon's post is here in charge of G. A. Moberly, who was born at Fort Vermilion where his father had charge of the Hudson's Bay post. Thus born a trader, he was brought up a trader and after serving many years with his father's company transferred allegiance to their great rivals and settled here with his wife. The church of England mission is in charge of Rev. C. Morris. His wife conducts classes of instructions for the Indian children in their own tongue. Our short stay at this place was made pleasant by the hospitable people.

A number of Indians were camped along the water's edge; the men spending the afternoon in lying listlessly on the grassy banks, smoking and watching us, or

engaging in some of their numerous "little games" to which they are all so addicted. The women were busy cutting wood a mile or so down stream. In engaging my guides for the next stage of the journey it was decided to pay them for the trip instead of by the day. Terms were arranged with alacrity by Tom Bear. Without doubt he has the science of handling the Indian down to the finest point. It was agreed that six days was sufficient for the round trip, three going and three returning. I therefore paid Bear their six days' wages and agreed to board them going and furnish them at Pelican Narrows with three days' rations for the return trip. Later it occurred to me that, should they become storm-bound returning, their provisions would run short. I suggested this to Bear. "True," he said, "that might happen." Calling the Indians into the store he informed them of our interest concerning their return. Taking from the shelf a large hook or troll he tossed it over the counter with the remark, "Here, take this, and if it storms, catchum fish."

Leaving Stanley on the morning of July 18th we made our first stop at the mouth of Rapid river, which drains Lac la Ronge into the Churchill. Less than half a mile from its outlet this river flows through a narrow rocky gorge, which has a considerable fall affording an excellent power site. The falls and rapids here are the finest seen on our journey.

During the day we found it necessary to make five portages to pass very heavy rapids. At the end of the last portage, which was over a quarter of a mile in length, we made camp for the night on a grassy bank overhanging the foot of the rapids. Wishing to cut some tent poles I discovered that my axe was missing. It had probably been left on one of the portages and it was only when we were forced to get along as best we could without it that we appreciated its value. After the camp was made in order, and the evening meal partaken of, I was strolling aimlessly along the banks overhanging the rapids, when, lucky to relate, I stumbled upon another axe, rusty and dull, but nevertheless very welcome. The sighing of the wind through the tree tops above, and the roaring of the rapids below, were music that made this camp one of the most restful sleeping places we had yet found.

The next day, being Sunday, might have been spent here with enjoyment had not the pest of flies made life in the woods unbearable. Rather than spend the day in a stuffy tent when the weather was so glorious, we set out again on the limpid waters of Trade lake, where the refreshing breezes banished every fly. Paddling leisurely along beneath sunny skies, on sparkling water that rippled to the gentle breeze, I could not but remark that this lake of islands with its purple hills in the distance exceeded anything we had yet seen on our travels. All too soon Frog portage came in sight and beckoned us away. It seemed that we were leaving the Churchill too soon to enjoy the best of its scenery.

Frog portage represents another strategic point on the old fur trading route. Here the traders left the waters of the Churchill, and turning south followed a chain of lakes and rivers leading to Cumberland House and the Saskatchewan. The lakes of the upper portion of this route are very similar to those we had passed through before reaching Lac la Ronge, though the surrounding hills are not as well wooded. Pelican Narrows was reached on schedule time and at the Hudson's Bay post I provided the Indian canoemen with their rations for the return trip. This village consists of a Roman Catholic church and mission, a cluster of log houses belonging to the Indians, and the trading posts of the Hudson's Bay and Revillon's. At Revillon's post I was informed that their district manager was in the residence, where he had his office, and would be glad to see me. Imagine our mutual surprise and delight when on meeting I recognized him as Clarence Umbach, an old Edmonton friend and former office assistant.

During our all too short stay under his hospitable roof I learned much of the great Reindeer lake district, on which his company maintained a post at Du Brochet. From various sources I had gathered scraps of information of this

great district which I was now able to submit for his verification or disapproval. He was even then preparing to make another trip to this northern post, on which he urged me to join him, and I would gladly have done so had I been able. Perhaps the three most interesting subjects of this district are the fish, the caribou, and the wolves. Reindeer lake is about one hundred and fifty miles in length by fifty miles in width and abounds in fish of many varieties and unusual size. During the winter great herds of caribou drift as far south as Du Brochet and are slaughtered in alarming numbers by the Indians. In fact, during the past winter, Umbach informed me, some two hundred Indians camped about this post had killed an average of two hundred and fifty caribou each which made a slaughter of fifty thousand of these valuable animals. Wolves also killed great numbers and it is quite evident that steps should be taken immediately for the protection of the caribou to prevent their extermination.

When ready to leave again we were provided by Umbach with an eighteen-foot canoe and two Indians who were to take us to the head of navigation at Sturgeon Landing. Leaving with a fair wind at five o'clock on the afternoon of July 23rd, we sailed till dark, and camped at the head of Sturgeon-Weir river. As we bid farewell to Pelican Narrows our late guides from Stanley were observed, with a number of friends, busy about a camp fire preparing a feast of the rations provided for their return. I have no doubt that they did not stir away till the last morsel had disappeared. Storm-bound or not storm-bound, the troll supplied by Tom Bear would be called upon to supply them with a fish diet for the return trip.

The 24th of July saw us make one of the longest journeys of any day on the trip. Sailing away from camp at 6.30 in the morning we caught a fair wind, and, between sailing and running rapids, traversed the whole length of the Sturgeon-Weir river by seven o'clock in the evening. There are several portages to be made on this river but they are quite short, especially the one at Scooping rapids. At this point we found a lady prospector, camping alone and doing her own representation work. She was delighted at the opportunity of sending out letters by us and expressed perfect contentment with her unique manner of living. Below Scooping rapids the river rapidly changes to assume a more uniform flow. The country becomes lower and flatter with less rock in sight. Banks of sand appear and small flats of light sandy soil which might be cultivated. Dense patches of small second growth poplar on old burns, stands of large spruce which has been missed by the fires, brule and wind fall, small areas of good grass and sandy ridges covered with jackpine were noted.

The river enters Amisk, or Beaver, lake on its west shore. The evening being ideal for crossing open water we decided to make a dash, as this was the last lake lying between us and the head of steamboat navigation. Simultaneously the sun set behind us and the full moon rose in our faces as we paddled across this beautiful sheet of water. Two years ago I had made surveys on this lake but had not reached the western part, and it was not until we neared the southern end that I could identify familiar land marks. At eleven o'clock we completed the long day's journey and disembarked at the little settlement of Beaver Landing, now almost deserted.

Beaver lake sprang into fame in 1912 owing to discoveries of gold on its northern shores. The nucleus of a mining town sprang up at this point and had it not been for the great war it might have thrived and grown to considerable dimension. Beautifully located on a high point of land overlooking the lake at the head of the Sturgeon river, up which canoes toil from the steamboat landing on Sturgeon lake and having also an alternative wagon route, it occupies a strategic position. When mining is resumed, as it doubtless will be, it may yet come into its own. Here I met my friend William Hayes, under whose hospitable roof pleasant evenings had been spent two years ago. He had retired for the night but was roused by the barking of his dogs and hastened up to welcome us and extend that genuine hospitality again.

By the river it is about twenty-five or thirty miles from Beaver lake to Sturgeon Landing. The water is nearly all swift and when low the rapids are dangerous. Now the water was high and travelling better. Leaving the next morning at nine o'clock and striking into the middle of the current we ran all rapids without mishap and covered the distance in four and a half hours. The scene that greeted us at Sturgeon Landing was a busy one compared with the more isolated posts. This is the head of navigation for the steamboats operating from The Pas, and the distributing point to the mining district of northern Manitoba. Freighters, prospectors and miners were hurrying about on various errands. Copper ore from the Mandy mine to the extent of about nine thousand tons had been hauled out during the preceding winter and piled at the water's edge. A barge was now being loaded from this pile. A boarding house, a pool room and a number of log cabins and stables constituted this frontier metropolis, yet the spirit of ambitious mining enterprise permeates the air owing to the proximity of the discoveries.

At seven o'clock in the evening Capt. Ross arrived with his steamboat *Nipawin* and a barge. A number of prospectors were on board and with feverish haste gathered together their canoes, baggage and supplies and, though night was fast closing in, started off for the interior. It was a stampede of small proportions but nevertheless sufficient to cause a thrill of excitement and recall similar scenes I had witnessed on a larger scale in the Yukon. Our Indians waited to take a long look at the steamboat, then turned their back on civilization and melted away in the direction of their own homes.

Next day we took passage on the good stern-wheel river steamboat *Nipawin* to complete our journey to The Pas with all the ease available. We were now across Saskatchewan, Sturgeon Landing being located on the border between this province and Manitoba. It is not, however, until one reaches a point on the Saskatchewan river about half way between Cumberland lake and The Pas that the waterways of this province are finally left. With a barge load of one hundred tons of ore we left on the evening of the 26th after a storm had abated, and crossing Sturgeon lake tied up for the night in the muddy waters of Cumberland lake. I had travelled by canoe from Beaver lake right through to The Pas two years ago and was therefore glad to avail myself of this opportunity of taking the steamer. Cumberland lake and the Saskatchewan river are very muddy at this time of the year, the banks are low and wet, mosquitoes are exceedingly bad and canoeing is anything but enjoyable on these waters. Historic Cumberland House was left behind early next morning. The Hudson's Bay post established by Samuel Hearne in 1773 is still carrying on, while Revillon's are located here also. These rival establishments are in charge of two Cotter brothers, both Hudson's Bay men till one left to join the French company and give his brother a friendly race for supremacy. A church and a number of log houses complete its showing and one cannot but marvel at the mystery of things when he considers that this was an important trading post before Fort Garry was established to pave the way for the great city of Winnipeg.

Soon the great Saskatchewan was reached and its muddy waters, low banks of clay and uniformly strong current stood out in bold contrast to the crystal waters, rocky shores, lake expanses and contractions of rapids and falls of the Churchill. Skillfully the little steamer nosed her heavy barge around the horse-shoe bends of the river's erratic course and hurried it homeward. Two sister boats were met puffing their way up stream with empty scows to receive fresh loads of the precious ore that made business so brisk on these waters after many years of stagnation. Seated in the pilot house with the captain I listened to tales of early days when he navigated the waters of this great Saskatchewan from Grand Rapids at Lake Winnipeg to the forks of the north and south branches and alternately up these to Prince Albert or Medicine Hat. His had been the pioneer transportation service that heralded an agricultural invasion. Now he was pioneering the transportation of a mighty mining industry.

Just as the shades of night began to fall the lights of The Pas became discernible. At 10.30 our little steamer docked at its pier in the mouth of the Opasquia river. Faces of friends appeared on the gang-way and in a few minutes we found ourselves comfortably settled in the Opasquia hotel where our mail and baggage awaited us.

Thus on Saturday evening of the 27th of July we completed the trip I had originally in view, though later I was to continue it through to Hudson Bay. After spending Sunday at The Pas Adams took his departure and returned to Edmonton, while I remained for a few days to transact certain matters of business. We had been six weeks out from Edmonton or five weeks coming from Fort McMurray to The Pas. This is not fast time by any means but considering the weather and that it was over a strange route it was fair time. At any rate it was as fast as I could manage to keep up with my notes.

The Pas to Norway House.

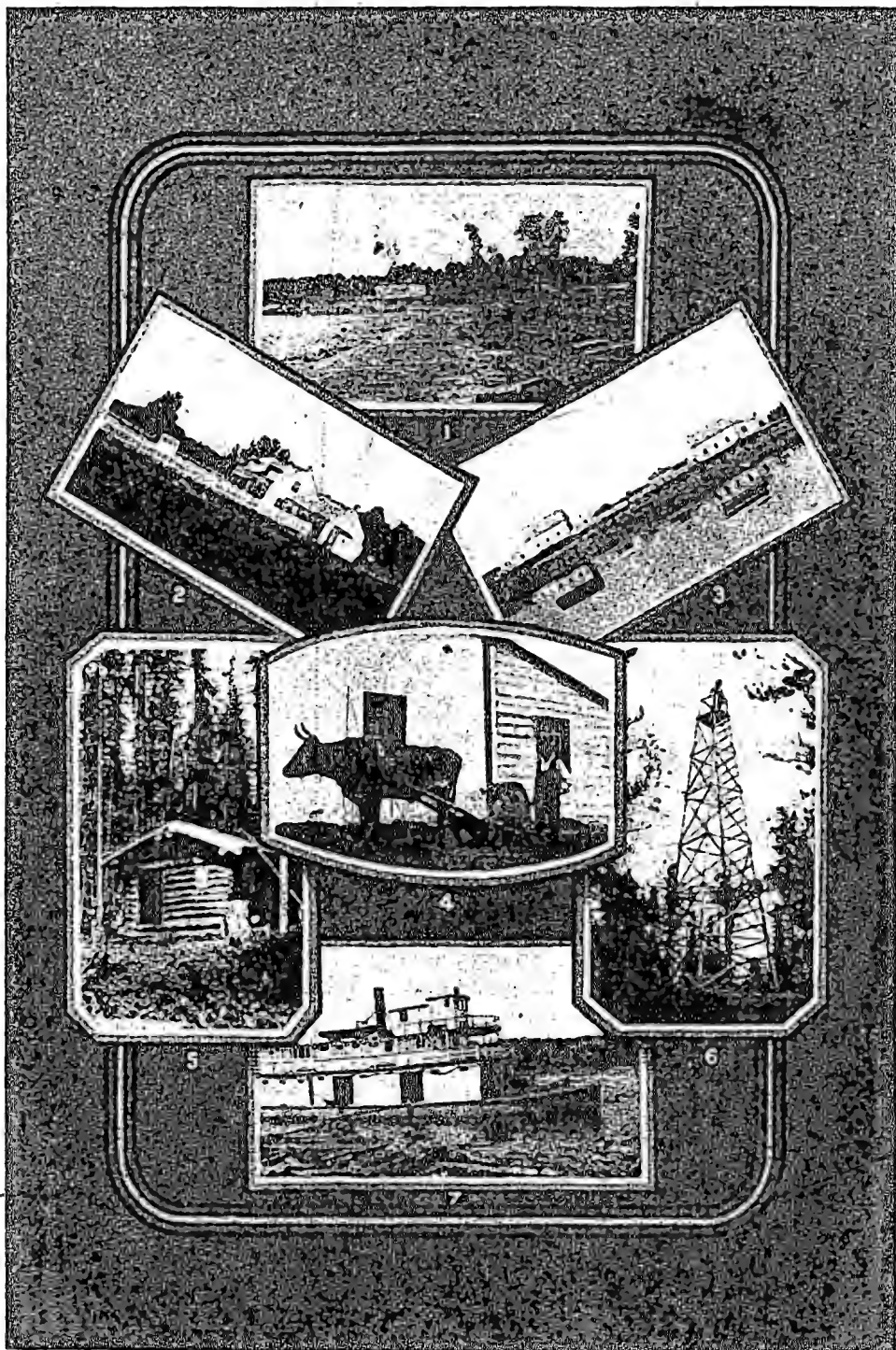
After an absence of a couple of weeks spent on various business matters at Prince Albert, Edmonton and other points in the agricultural belt, I returned to The Pas on the morning of August 13th to continue my journey through to Hudson Bay. This part was carried out under somewhat altered conditions from the preceding portion. Instead of conducting my own limited expedition I was to accompany as guest, or attache, a larger party making this trip, which had been arranged by J. A. Campbell of The Pas, Commissioner of Northern Manitoba and member of parliament for the federal constituency of Nelson. Its members included Prof. R. C. Wallace of the University of Manitoba, Hon. A. B. Hudson, M.L.A. formerly Attorney-General of Manitoba, Dr. S. M. Fraser, medical health officer of Manitoba, and H. Symington, Mr. Hudson's law partner. On my first arrival at The Pas Mr. Campbell had outlined his proposed trip and invited me to join. I was glad to avail myself of the opportunity as travelling under such conditions promised to be much more pleasant as well as more economical.

The town of The Pas is now a thriving commercial center and is the distributing point for an extensive territory lying to the north. Its fur trade has always been considerable while in more recent years the mining activity to the north has created an additional stir. It is believed that this town was first established as a trading post by the French in 1759. The value of furs still shipped out from this point amounts to about \$500,000 annually. The Hudson's Bay Company have their headquarters for a large district here, Manager Hugh Conn being in charge, while other commercial concerns are well represented.

Indian agent McDonald kindly offered to transport our party as far as the east end of Cedar lake in his gasoline launch and at the last moment Jimmy Moors, a well-known prospector and merchant of The Pas, joined the party. He proved a most valuable acquisition, bringing along a canoe with Evinrude motor, and taking charge of the commissariat. His never-failing resourcefulness and genial disposition added much to the comforts and pleasures of the trip. McDonald also took an Indian assistant with him.

Leaving The Pas at noon of August 13th the launch was headed into mid-stream and made rapid progress down the winding course of the great Saskatchewan. A side trip was made to visit Moose lake on the shores of which camp was made for the night. The land surrounding the lake is low and flat, to the north rocky and wooded but elsewhere quite open and covered with an exceptionally heavy growth of wild hay. Having just read of the severe droughts in the southern parts of Alberta and Saskatchewan it appeared to us almost criminal to see the thousands of tons of hay and feed wasting here when cattle were perishing in those parts.

Next day we retraced our way to the Saskatchewan river and following it down reached the old Hudson's Bay post and Indian village of Chemahawin



1. Copper ore dump, Sturgeon Landing.
2. Hudson's Bay post, Chemahawin.
3. Hudson's Bay post, Cumberland House.
4. The Waterman, Cumberland House.

5. Prospector's cabin, Beaver (Amisk) lake.
6. Fire ranger's lookout tower, Stanley.
7. SS. Nipawin, on Saskatchewan river.

early in the afternoon. This is where the Saskatchewan river flows into Cedar lake, a large shallow body of water surrounded by limestone ridges and muskeg swamps. On account of a storm we spent the remainder of the day here. On the south shore of the lake there is a portage about three miles in length leading across to lake Winnipegosis. Early records speak of French traders establishing a post, called Fort Bourbon, on the Cedar lake end of this portage, about the year 1760, but no trace of it is to be seen now. Pieces of amber were picked up along the beach and there is believed to be a considerable deposit of it in this neighbourhood. The Hudson's Bay post is here in charge of James Campbell. There is also an English church and Indian school building though now without any one in charge. Raspberries and strawberries appeared fairly plentiful and the vegetable gardens belonging to the Indians were in fair condition.

We left Chemahawin at 7.30 next morning, taking along a couple of extra canoes with Indian canoemen to convey us over that section of the river lying between Cedar lake and Lake Winnipeg. The launch was left at the east end of Cedar lake, where the expansion of the Saskatchewan river which forms it now contracts in its last reaches before emptying into Lake Winnipeg. This section of the river contains numerous rapids and many boulders and was too shallow for navigation by the launch.

Leaving Cedar lake at 2 P.M. with Moor's motor canoe towing the other two on the larger stretches of water between the rapids, we reached the head of Grand Rapids at six. These rapids are overcome by a four mile tramway extending from the mouth of the Saskatchewan river at Lake Winnipeg to the head of the rapids where we had landed. This tramway was constructed in the early days by the Hudson's Bay Company but for many years past has been abandoned. It is still in fairly good condition and an old Indian of Grand Rapids operates a horse car over it for the convenience of travellers. The old residence and warehouses at the head of the rapids are now falling to pieces. A messenger was dispatched to engage the car and while waiting for its arrival we made supper on the grassy lawn in front of the old residence and explored the interesting points of the vicinity. A wire cable is stretched across the water at the head of the rapids where the water power engineers have been making measurements. There is considerable power available here, also extensive resources of wood, and projects for the establishment of a pulp mill at this site have frequently been mentioned.

In the evening the old Indian with his horse and car arrived. Passengers and baggage were quickly loaded and the pony trotted back with its load. This tramway is in reality a well built narrow-gauge railway, being principally contained in two tangents and with a remarkable minimum of grade. Camp was made at the little settlement of Grand Rapids and the party was royally entertained by Messrs. McKay and Morrison. This section of country grows excellent crops of potatoes. One of our party asked McKay if he experienced any difficulty in keeping his potatoes from freezing during the winter time. He said he did not and in describing his cellar mentioned that a pet bear belonging to his children had taken up its winter quarters beside the pile of potatoes in the cellar. "You know," he said, "there is considerable heat in a bear." This is certainly a novel way of solving the question of warm storage in these cold latitudes.

Early next morning the steamboat *Wolverine* arrived from Selkirk with a party of excursionists. A favourite source of amusement or adventure for these excursionists is the running of Grand Rapids. Indian canoemen are engaged for the trip, the party transported by tramway to the head of the rapids and the thrill of shooting these boisterous rapids in canoes experienced on the return journey. Some twenty minutes' excitement is provided coming back. Charles Campbell, Mines Superintendent of the Granby Consolidated, joined our party here, having come from Winnipeg on the *Wolverine*, while Indian agent McDonald left us to return to The Pas. Here we embarked on the steamer and

crossed Lake Winnipeg in the afternoon, arriving at Warren's Landing at 8 P.M. In the early days the Hudson's Bay Company maintained a trade post at this point but later their headquarters were established at Norway House on an arm of the lake at some distance north. Warren Landing is now only a summer fishing camp with an array of frame buildings, warehouses, small lighthouses and a fleet of fishing boats. The season was just closing, the limit of fish allowed having been reached.

The next morning we transferred our equipment to the steam tug *Victor* which transported us in three and a quarter hours to historic Norway House. The channel leading from Lake Winnipeg to Norway House is wide but full of many rocky islands and makes an exceptionally picturesque route. The settlement at Norway House is scattered over numerous rocky islands and points of mainland. It consists of the Hudson's Bay group of buildings, the Methodist mission, Anglican mission, fire ranger's quarters, and a number of Indian homes.

The vicinity of Norway House is very much broken up by irregular bodies of water, islands, and rocky hills. What soil exists is principally clay, occurring in small irregular patches amid outcrops of rock. As a rule vegetables thrive well, though this year gardens appeared to be unusually late. The Methodist mission cultivates several small areas while the Hudson's Bay have a small garden enclosed by a high fence where various species of garden vegetables, rhubarb, and domestic currants were thriving. In the center of this garden there stands an old sun-dial.

The post consists of a striking array of buildings arranged in rectangular order about a grassy court-yard and fronting on the water. The court-yard is reached by an arch gateway leading through the center of the front building directly from the wharf. On the roof of this building is a bell bearing the date 1782. The buildings consist of warehouses, stores, offices, carpenter and boat-building shop, men's and officers' quarters, manager's residence and a small stone jail. The latter stands as a monument to the autocratic rule of this company in its earlier days. On a rocky promontory adjacent to the wharf stands the tall flagpole from which flutters the red ensign with the mystic letters H.B.C. Nearby stands a granite monument erected to the memory of two officials of the company who were drowned at Sea River falls, a few miles north of the post.

The Methodist mission at Rossville is in charge of Rev. Geo. Denyes and consists of a small frame church, a large modern industrial school building, a hospital and several smaller buildings. The fire ranger's residence is on an island mid-way between the Hudson's Bay post and the Rossville mission. On a slight rise behind the house is a lookout tower from which an excellent view can be obtained for many miles in every direction.

The afternoon was spent in making arrangements for continuing our journey through to Hudson Bay. Mr. Campbell's original intention was to go *via* Hayes river, the old Hudson Bay route to York Factory. Some difficulty being experienced in obtaining satisfactory Indian guides for this route, we changed our plans and decided to follow the Nelson. The Norway House Indians have been exceedingly fortunate during the last few years in trapping. Furbearing animals in this district have been very plentiful and times have been good. Whether this accounts for it or not I cannot say, but at any rate we found them the most independent, impudent, and lazy lot in the whole country. In the first place they do not want to work, and in the next place they will play the hold-up game to its limit if they can. I would strongly advise anyone contemplating a trip through this section to either take his own men with him or make iron-clad arrangements in advance.

Having completed all arrangements on Saturday afternoon for the continuation of our journey we spent Sunday at this historic post. Half of our party were royally entertained at the Methodist mission and the remainder, including myself, with Manager R. A. Talbot at the Hudson's Bay post. These very

hospitable people made our short sojourn most enjoyable. Many historical narratives were related of trade in the early days and these were augmented by reference to some old journals kept at the post. In addition to our party was a representative of an English mining company, Harold Paull, who was on his way to Oxford House where the company's prospectors had recently made some encouraging finds of gold-bearing quartz.

Norway House to Hudson Bay.

Our party left Norway House on Monday morning of August 19th, though for the first time in my season's experience I cannot say early, as our chief Indian guide did not appear on the scene till nine o'clock. We now had four canoes, including Moor's gas canoe, and a party of eight whites and eight natives. Paull also left about the same time with a canoe and three natives. The weather was very fine and warm and continued so for several days. Mosquitoes were rather troublesome at times on shore but we were always free from these pests while on the water.

After travelling for about an hour our canoemen suddenly put to shore and prepared to "make a fire." It appeared they had not had breakfast and our feelings may be better imagined than described. A council of war was forthwith held on the spot and the Riot Act read in no uncertain terms. We gave them plainly to understand that for the remainder of the journey they had to dig in and work or there would be trouble. Our parley had its desired effect and after this matters progressed much better, though our chief guide did not know the way. Fortunately another canoeman, or mere boy as he was, managed to put the old fellow right in his moment of confusion.

The route lay almost north along the most easterly channel of the Nelson. The westerly channel follows Playgreen lake as far as Cross lake, into which the easterly empties, as well as Minago river. The latter forms the old canoe route between the Nelson and Saskatchewan by way of Moose lake. A few miles below Norway House are found Sea River falls, which are passed by a short portage. A few miles below these Paull bid us farewell and turned to the east to follow a chain of lakes on the headwaters of the Hayes river as far as Oxford House. This section of country is very rocky and covered with small woods. Some good balsam was observed but the tamarack has been nearly all killed by injurious forest insects.

For three days we travelled steadily northward, though by a winding and circuitous route. Many magnificent rapids were encountered around which good portages were invariably found. In our party were a geologist and a mining engineer, namely Professor Wallace and Charles Campbell, and an additional interest was aroused in our progress by their descriptions of the geological features of interest we were passing. Before reaching Pipestone lake the Keewatin formation gives way to Huronian and this again gives way to Laurentian.

On reaching Pipestone lake we landed for a few minutes at the end of Ross Island at a spot where the young son of Indian Chief Ross of Cross lake had been killed by lightning eleven days previously. The spot is marked by a wooden cross. On an island in Cross lake there is a large modern stone building in which the Oblate fathers conduct a school for Indian children. We were informed that about eighty pupils were then in attendance. A short stop was made at noon of August 20th at the Hudson's Bay post on this lake where Manager Gordon welcomed us. The land surface in this vicinity consists of a heavy overburden of clay and the many gardens of the settlement were in a thriving condition. Potatoes were in blossom and hay was then being cut. There is considerable good agricultural land about here and the results of experiments already made indicate that farming could be successfully carried on.

Between Cross and Sipiwesk lakes there are many falls and rapids, and the route, though strenuous because of the numerous portages necessitated by such cataracts, is most beautiful and interesting. To overcome these a tramway some fifteen or twenty miles in length had been constructed between these lakes but is now out of repair. Ebb and Flow rapids are very picturesque but by far the best sight is White Mud falls. These falls consist of three sections, two of which are side by side and separated only by a small rocky island. The third section is at right angles to the other two, thus giving a horseshoe effect to the whole. The falls proper are about fifteen or eighteen feet high but for some distance below the rapids leap and foam through a narrow canyon and will easily bring the total height up to thirty feet. A portage, half a mile in length, leads past these falls. A succession of poles laid crossways along the entire route remained in evidence of a York boat having recently been transported. These poles act as rollers and over them the boat is dragged by its crew. At the south end of the portage stands a monument, enclosed by an iron fence, erected in memory of a missionary who lost his life by being carried over these falls.

At Red Rock rapids an intrusion of Huronian was noticed and in it a quartz vein about four feet wide which appeared to be well mineralized. Chain of Rocks rapids, so named from a series of rocks jutting up across the stream, are the last before Sipiwesk lake is reached. This is another large and exceedingly beautiful lake dotted with many islands. Several bands of Indians were located at various points engaged in fishing. White traders gather up these fish in motor launches and ship them by way of Landing lake to the Hudson's Bay Railway at mile 185. From Sipiwesk lake the Nelson river contracts and flows the remainder of the way to Hudson Bay with but another principal expansion, namely Split lake.

As five of our party found that business would compel them to turn back before reaching the Bay, and as we were all anxious to dispense with our Indians as soon as possible, we left the Nelson route by making a portage to Landing lake at a point a few miles east of the principal meridian of the Dominion lands system of survey. Turning westerly we followed Landing lake to a point on its northwest extremity where a portage leads north to Wintering lake. The Hudson's Bay Railway passes between these lakes and intercepts the portage about a mile north of Landing lake. Here we arrived on the morning of the 23rd, the point being known as mile 185, that is 185 miles from The Pas. A number of Indians were engaged in packing flour from the railway siding to Landing lake. The footing on this mile of portage is only fair, being soft in places and rough in others, yet the Indians' packs were 200 pounds each. Each man received fifty cents for a round trip. Our guides were promptly dispensed with and we proceeded by gas car to Piquitony, a divisional point at mile 214.

It was two years since I had visited this point and very few changes were to be noticed. Engineers' offices, railroad shops, and a few frame buildings consisting of a couple of stores, restaurants and private houses make up the town. This was the limit of travel for Fraser, Hudson, Wallace, Symington and Moors. Here they would await the return of the *Muskeg*, as the train that made bi-weekly trips between The Pas and the end of steel was called, and on its return to civilization. With the two Campbells and Divisional Engineer Moffat I climbed aboard a gas car and started out for the end of steel at Kettle rapids. These gas cars are merely an adaption of the section man's hand car to power, being driven by a gasoline engine. They make wonderful time, in fact to a person perched on top of the narrow body with his feet resting on the front axle and speeding at the rate of twenty-five or thirty miles an hour over a newly constructed road they make much too fast time.

We left Piquitony at 7 P.M. and arrived at the end of steel at 12.30, having covered a distance of 118 miles in five and a half hours. On the way we stopped to pick up a couple of Indians and it must have been laughable to see how we

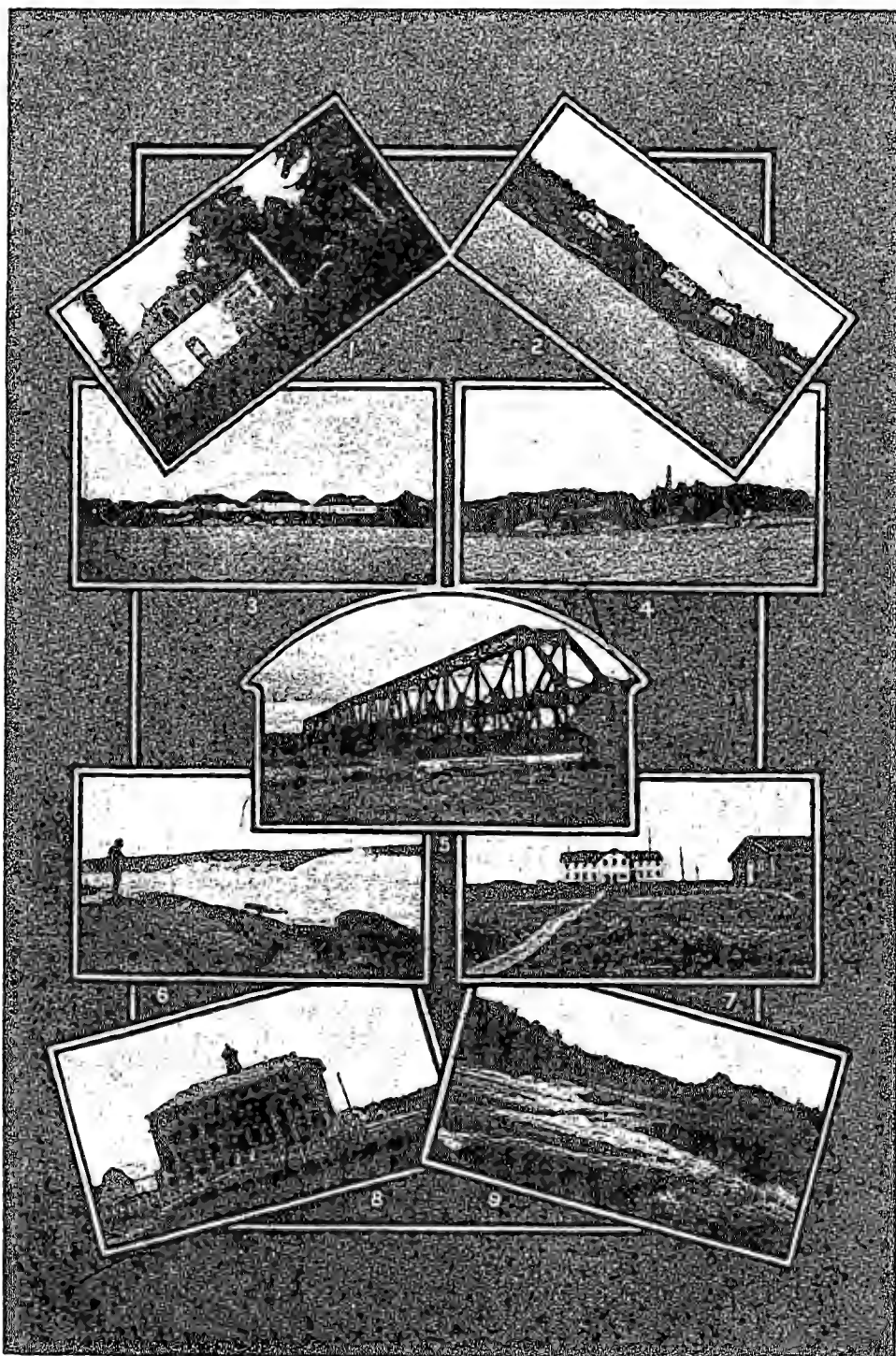
all managed to hang on to that little car. It was a half-frozen party that finally emerged out of the darkness into the welcome lights of Bridge Engineer Campbell's camp. A phone message had announced our coming and Chief Engineer Porter was on hand to receive us.

The Hudson's Bay Railway makes its second crossing of the Nelson river at this point. Steel has been laid from The Pas here, a distance of some 332 miles. A magnificent steel bridge of 1,000 feet span was just receiving its finishing touches. The right-of-way is graded the remainder of the distance to Port Nelson and the building of a few smaller bridges and the laying of the ties and steel is all the work that now remains to complete the road. Its total length will be 424 miles.

Porter had arranged to accompany us on the remainder of our journey and next morning we set out in two Chestnut canoes, each manned by two Split lake Indians, to traverse the mighty Nelson to its outlet. This is one of the greatest rivers in the world. It drains 250,000 square miles, is 430 miles in length and has a drop of 713 feet. Kettle rapids are the most magnificent on the whole route and are capable of generating 1,200,000 horse power. Our fine weather now forsook us and we travelled nearly all day through a drizzly rain. Many rapids occur until the head of navigation is reached. A halt was made for dinner on Long Spruce portage, so called from clumps of exceptionally tall spruce trees found there. Many rapids were run and our canoemen exhibited wonderful skill and dexterity in the manipulation of their crafts. In fact these Indians are infinitely superior in every way to the Norway House tribe. They are not only most expert canoemen but indefatigable workers and of most agreeable dispositions. It was indeed a pleasure to travel with them, the head man David being a particularly fine specimen. My experience has lead me to consider ninety per cent of Indian help as a nuisance but when a good Indian is found he usually proves a real treasure. I could ask for no better guide or travelling companion than this faithful David.

The formation changes from massive granite at Kettle to limestone before the head of navigation is reached, the Limestone rapids being so named. More clay appears and the shores become more thickly wooded but with small stunted spruce. The head of navigation was reached at ten the next morning but the expected launch from Nelson was not in sight. Having passed the heaviest rapids we transferred our load all to one canoe, sending the other back from this point. Our remaining 20-foot freight canoe was therefore well laden down when we continued our journey, for besides our own baggage and mail and express for Port Nelson and York Factory, there were six of us in all including David and his assistant. During the afternoon a large wolf emerged from the woods and trotted for some distance along the shore opposite our canoe. He eyed us attentively but did not appear at all disturbed by our proximity. Though this was the 25th of August hugh cakes of old ice were still to be seen here and there along the shore. In spite of cold weather and the proximity of so much ice, the mosquitoes and black flies were so bad on shore that we camped this night on an open sand bar in order to escape them.

At nine o'clock the next morning Seal island was passed. It was here that Ben Gillam, the poacher, established his rendez-vous in the early years of the fur trade, his post being later captured by Radisson. The tide was first observed at the lower end of this island, being on the ebb when we arrived. At 10.30 we had reached Flamborough Head, the last high point of land over-looking the Bay. It is now capped by a beacon, some 90 feet in height, erected for the guidance of mariners. From here the bridge, leading from the shore at Nelson to the artificial island created for docking purposes, could be seen, the spans appearing like a series of dots and dashes over the water. The Nelson now widens out to majestic proportions, the horizon meeting the waters easterly on Hudson Bay. At two o'clock of August 26th we arrived at Port Nelson and



1. Old Hudson's Bay residence, head of Grand rapids.
2. Hudson's Bay post, Cross lake.
3. Hudson's Bay post, Norway House.
4. Fire ranger's headquarters, Norway House.
5. Hudson Bay Railway bridge over Nelson river at Kettle Rapids.

6. Entrance to Churchill harbour.
7. Engineer's camp, Port Nelson.
8. Indian industrial school, Norway House.
9. Sea River Falls, Nelson river,

were met by Terminal Engineer McLachlan and escorted to quarters made ready for our reception in the engineer's building.

We were now at Hudson Bay. The long journey had been completed and it was with feelings of mingled satisfaction and curiosity that we wandered around and examined all points of interest. Very little activity was then in progress, the work having been almost suspended for the time being. The population had dwindled down to almost nothing. McLachlan and his assistant Ralph had a very small staff of engineers and workmen engaged in taking soundings and putting the finishing touches to some odd jobs. Wireless operator Parkin and Sergt. Thomson of the Royal Northwest Mounted Police constituted the remainder of the white population. The shores here are low and swampy and the forest consists only of stunted spruce trees. The harbour improvements are well advanced though aside from a small tug and a few coasting schooners no marine activity was in evidence. This bleak and desolate camp constitutes the nucleus of what may be expected to become an important seaport when the Hudson Bay project is finally put into commission.

The newness of this terminal-in-the-making greets the traveller in startling contrast to the mouldering and historic posts along the route that we had just travelled, and the raw state of the unfinished constructions strikes a note of discord in the harmony of these wilds. Man's work here appeared like a gash in the canvas of nature's picture, or a warning of a new order of things to break the spell of centuries of silence. Though the Nelson here boasts of many historical romances, yet no landmarks of early activity are to be seen from this point. York Factory has for long years been the sea port of the fur trade. It is located on the Hayes river, near its mouth, and about 14 miles southerly from Port Nelson. These two great rivers parallel each other in the last few miles of their courses and flow into Hudson Bay by a common estuary. Between them lies a low, swampy strip of land difficult of passage. A winter trail connects the old post with the new terminal but during the summer the route is by water and is some 30 miles around. As our original plans provided for a stop at this most historic and important post we were anxious to make a trip over to it. However it was not to be. An opportunity arose to pay a flying visit to Churchill and time would not permit us to avail ourselves of it and still get around to the Hayes river. We decided on Churchill, though reluctantly giving up seeing York Factory.

Port Nelson to Churchill and return.

The small tug *Kathleen* was being despatched by Chief Engineer McLachlan on a tour of inspection to Churchill under the immediate charge of his assistant Clyde Ralph and our party was invited along. The forenoon of August 27th was spent in preparing for the trip. The tug was washed down, her bunkers filled with coal, her larder with provisions and an extra ton of coal in sacks and a couple of barrels of fresh water placed on the forward deck. Blankets and kit bags were stored in the hold and at two o'clock in the afternoon the anchor was weighed. The crew included Capt. Watson, master, Capt. Kilman, navigator, two engineers, two firemen, a steward and two or three deck hands. Ralph, J. A. and Charles Campbell, Porter and myself made up the passenger list. Our quarters were rather cramped as like most tugs *Kathleen's* space was chiefly occupied by machinery, nevertheless in good weather travelling on this staunch little craft is very pleasant.

From Port Nelson to the open waters of the bay, the mouth of the river has to be navigated by a long and sinuous course. The banks on either hand are low and flat and several beacons have been erected along the water's edge as

landmarks for the mariner. The waters here are very shallow, in fact at ebb tide great mud flats appear between the main channel and the shores. It is therefore necessary for a vessel to stick closely to the channel. This is no easy matter particularly as it is continually changing its location. Great quantities of mud and silt are carried in suspension by the waters of the Nelson and deposited at its mouth. Huge cakes of ice are carried down the river following the spring break-up while others are blown in from the bay by storms or carried to and fro by the tide. The result is that the water's channel from the point where it first meets the tide until the open bay is reached is continually being filled in and gouged out in various places. Hydrographic surveys have determined this channel which is sufficiently deep to accommodate boats of considerable draft. It has been buoyed out and a careful pilot should experience no difficulty in following it. The ever shifting nature of the channel makes it necessary to replace these buoys from time to time while the heavy ice of the winter season prevents their permanent establishment from year to year. A few miles below Nelson the wreck of the *Allette*, grounded on these mud flats, looms up as a warning to the pilot to closely follow the buoys marking the channel.

With tide and current in our favour we quickly slipped out into the open bay and stood well out to sea in order to pass the Nelson shoals. For many miles after leaving Port Nelson the water is shallow and at low tide these shoals are exposed. Darkness prevented our seeing them but before retiring for the night we had rounded them and headed into a more northerly course. Our sleeping quarters below the forward deck were cramped and crowded. Descending by the narrow hatchway we found them warm and comfortable after the chilly breeze above and lost no time in settling down for the night.

Now a never-to-be-forgotten experience befell us in the shape of a howling gale from the northwest. The storm struck us about midnight and continued with unabated fury for about 24 hours. The velocity of the wind at times rose to between 60 and 80 miles an hour. The sea was lashed into exceeding roughness and our little tug was tossed about like a cork on the angry waves. There was no escape and the only course that remained was to keep her prow headed into the storm and battle against it with engines running at half speed. The hatchway was closed yet as wave after wave broke over the decks deluges of water found their way through various crevices and drenched our quarters most thoroughly. There was nothing for us to do but remain below and make the best of it. For my part I lay on my bunk and made a sort of canopy by stretching my camp canvas over me from head to foot. This warded off the heavier bursts of water but did not prevent me from getting thoroughly soaked.

One large wave breaking over the bow of the deck carried aft our barrel of drinking water and half a dozen sacks of coal. The remainder of the coal on the deck was thrown overboard to lighten the bow. Water found its way into the firemen's hold and at one time came within a few inches of reaching the fires beneath the boiler. By the most strenuous effort the pumps were able to hold it in check otherwise had it been necessary to draw the fires to avert an explosion the tug would have drifted to the mercy of the waves and everything would certainly have been lost.

The cook's galley was sadly wrecked. His stove was hurled from its stand, his cupboards were upset, his provisions tossed about and broken dishes scattered promiscuously in every direction. As no one thought of eating it mattered little at the time. The magnetic influence on the compass is sufficient on Hudson Bay to seriously interfere with its usefulness in navigation. The captains had this additional disadvantage to contend with and in this connection proved their mettle. In spite of the howling gale and blackness of night Capt. Kilman managed to catch a glimpse of Polaris through a temporary rift in the clouds. With his handy sextant an observation was obtained and due allowance for the error of compass was accordingly made.

For several hours our situation was indeed desperate but our crew proved themselves true sailors and the little tug *Kathleen* a right worthy sea boat. Cape Churchill eventually loomed up and after rounding it the welcome beacon of Churchill could be seen. At 6.30 on the evening of the 28th we entered the mouth of Churchill harbour. To the right could be seen the ruins of old Fort Prince of Wales while to left Battery beacon loomed up against the stormy sky. The roar of the breakers, mountain high and white and fleecy with foam, welcomed us to this haven. In less time than it takes to tell we had slipped from the violence of the angry sea to the calm and peaceful waters of the landlocked harbour. All hands hurried on deck and lustily cheered as the anchor was dropped in 30 feet of water opposite the old Northwest Mounted Police barracks. A little nearer the Hudson's Bay whaling station a coasting schooner was peacefully riding at anchor in 36 feet of water. Considerable controversy as to the merits of Nelson and Churchill harbours has arisen from time to time. As we glanced about this natural haven and pictured the raging sea that we had just narrowly escaped we one and all voiced our appreciation at having reached Churchill instead of Nelson at this hour. Without any difficulty we had entered the harbour during the roughest of gales and our protection here was all that could be desired. It would have been utterly impossible to have reached security and such shelter at Nelson and I very much doubt if our tug could have ridden out the storm at anchor in its roadstead.

With all danger past and the tug riding peacefully in the security of this harbour appetites returned with surprising alacrity. The steward soon had his little kitchen and dining saloon reconstructed and tried to crowd into one meal the three menus of the day. After supper a small boat was lowered and a visit made to Capt. Taylor on the Hudson Bay schooner. We found him ready to sail for York Factory on his last trip of the season. He was waiting for the storm to abate and expressed great surprise at our safe arrival. His preference for Churchill as contrasted with Nelson was most emphatic. His schooner is a most interesting type, a very serviceable and economical boat for these northern regions. It is rigged as a sailing vessel carrying auxiliary oil engines and we were informed this combination gave excellent satisfaction. I was naturally interested to observe by the makers' plate that she was built by R. Kitto and Sons, Port-haven.

Next morning Capt. Taylor weighed anchor at eight o'clock and steering out into the bay hoisted sail and scudded before the dying gale at a merry clip. Our party spent a most interesting day in visiting various points of historic interest about the harbour. Naturally the ruins of old Fort Prince of Wales held first attention. This interesting structure stands on a rocky point of land at the harbour's entrance. It was erected by the Hudson's Bay Company in the years 1733 to 1747 of stone masonry. The walls are 34 feet thick at the base and about 16 feet high. The outside dimensions are 312 feet square, the inner enclosure being about 132 feet square. It was manned with 40 brass cannon. In 1782 it was captured by the French Admiral LaPerouse and partly destroyed. The walls are still in fair condition but the inner residences are almost totally destroyed. The 40 cannon are still to be seen scattered about and overgrown with vegetation.

Another interesting point is the post of the Royal Northwest Mounted Police overlooking a little bay about a mile up the harbour and on the same side as the old fort. This post is now abandoned. The Hudson's Bay post is also on the same side of the river and about four miles up the harbour from the police post. Here we met Manager H. C. Moir who treated us to a most sumptuous duck dinner. On the opposite side of the harbour on the right bank of Churchill river is located an old Hudson's Bay whaling post. About this post some ten or twelve Esquimaux were camped in temporary shelters. They grinned us

welcome, posed for pictures, and finally took us for a sail about the harbour in an open whale boat. These fellows are very bright and jolly, expert sailors and good hunters. They had just completed the purchase of another season's supply of goods and were preparing to return to Chesterfield Inlet. They invited us to dine but at sight of a huge slab of blubber which constituted their menu we quickly found excuses. On the other point opposite the old fort is to be seen the remains of an old battery and nearby a powder magazine in a fair state of preservation.

The country surrounding Churchill is rough and rocky and almost devoid of forest, only a few small stunted spruce trees being seen. In tramping around we started up a silver fox which scurried off to safer quarters. A number of white whales were observed in the harbour. The Esquimaux hunt these with harpoons or catch them in nets made of cod-line or clothesline. These whales like to wallow and play in shallow water and groups of four or five could often be seen floundering on top of the water. They are desperately afraid of motor boats and Moir described how he catches them by setting nets and driving the whales into them with his motor boat. A number of seals were also seen. These appear very curious. Popping their heads above water they would take long steadfast looks at us and then leisurely disappear.

The harbour at present would probably accommodate four or five large ocean going vessels. With a little dredging out it could be made to serve several more as well as numerous smaller vessels. The ebb and flow of the tide, especially the ebb being augmented by the current of the river, makes a very strong current at the mouth of the harbour. This is one of its drawbacks. However it is not a serious defect and could be easily relieved by blasting out a channel across the point of land about a mile and a half above the old powder magazine. On the right bank of the river there is an excellent location for railway terminals. Indeed the whole situation appears infinitely superior to that found at Nelson.

This then completed the extent of my journeyings for the season. After having visited all points of interest and exhausted our supply of negatives we reluctantly bade farewell to this most interesting spot and turned our faces homeward. The white population here consists only of Moir and his assistant. Esquimaux and Indians make up the rest. At 1.35 on the afternoon of August 30th we steamed out of the harbour with an ebb tide and heading into the bay were soon out of sight of land. A heavy swell was all that remained of the violent storm we had encountered on our upward passage. The weather continued fair though the night was cold. Wrapped in our overcoats we sat out on deck to watch the sunset and save for the wake of our boat and the black streak of smoke no sign of civilization could be seen. Port Nelson was reached without mishap the next day at noon. In summing up the varied attractions I expressed the wish that a polar bear might have exhibited himself. My wish was no sooner expressed than satisfied, two polar bears appearing between the tug, which had anchored in mid-stream, and the dock. One of these was driven ashore and shot. Next day at noon polar bear steak appeared on our menu at the engineer's camp.

On Sunday evening, the first of September, we left Nelson by motor launch and taking advantage of the incoming tide soon reached Seal island where we camped for the night. The next day the launch took us as far as the head of navigation on the Nelson, a distance of some 60 miles above the port. The weather was quite raw and cold and snow flurries continued nearly all day. The launch then turned back. Our Indian canoemen, with our baggage proceeded up stream, fighting their way against the heavy rapids that lay between this point and the end of steel. We chose to walk and leaving the river followed a path for some four miles through the bush to intercept the right of way of the Hudson Bay Railway. Walking along this was fairly good and we covered forty-five

miles in two days, arriving at the end of steel in the afternoon of the 4th of September. Our Indians arrived a few hours later.

We now bade farewell to roughing it as Mr. Porter's private car lay on a side track awaiting our return. Foot-sore and weary we climbed aboard and the chef soon banished our trouble with tempting feasts.

A couple of days were spent here idly waiting for the arrival of the work train which was to pull us back to The Pas. I obtained some good photos of the handsome bridge just completed over the Nelson at Kettle rapids and seized the opportunity to write up my notes which had fallen in arrears.

Our engine arrived on the morning of the 7th and we were soon speeding homeward. This railroad is well built, the track is ballasted and for a new road travelling is exceptionally good. The train stopped for the night at the divisional point of Piquitonay. The next morning it left at 7.30 and running leisurely all day reached The Pas at 8.30 P.M. Leaving The Pas the next day I reached Winnipeg the evening of September 10th and a few days later found myself back at my office desk in Ottawa.

Notes on natural resources.

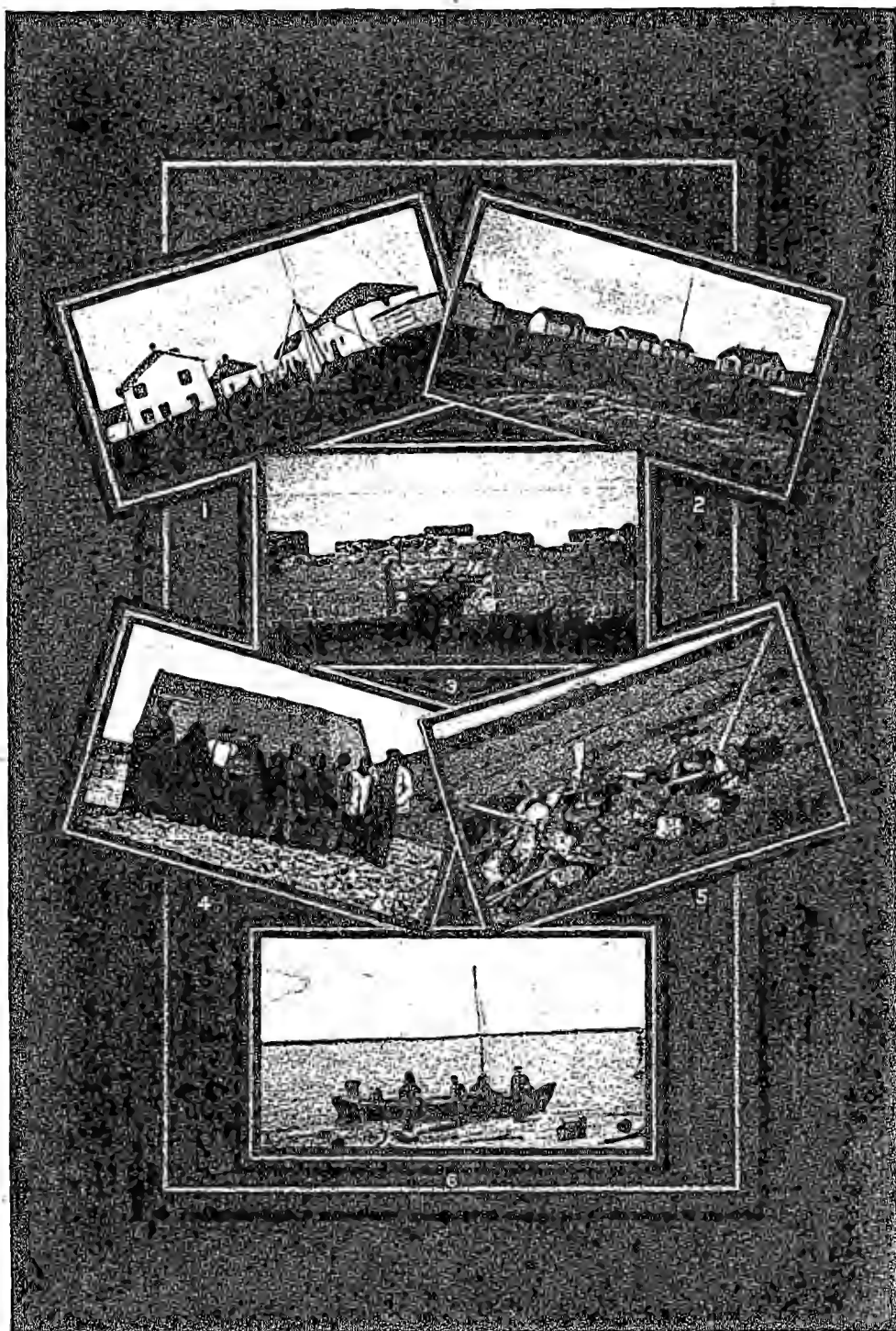
In looking back over my trip and summing up the possibilities of the country traversed there are a few outstanding features worthy of special attention. True the territory in which I spent most of my time lies in the far north and well beyond the fertile belt; yet it is not void of worth by any means and may even prove exceedingly rich.

Between Edmonton and Fort McMurray the country may quite rightly be classed as agricultural land, though north of Lac la Biche it is practically worthless in its present condition. This is merely because of its lack of drainage. As a vast reclamation project it offers encouraging possibilities. Once drained and cleared this section should readily fall into line as highly productive farm lands. Mineral assets in the Fort McMurray region include vast deposits of tar sands which outcrop along the banks of the Athabaska, Clearwater and Christina rivers. Gas has been flowing for several years from a well bored for experimental purposes at Pelican rapids on the Athabaska river. It has also been found at several other points. Boring for oil is being prosecuted with encouraging indications. Sulphur springs occur on the Clearwater. Outcrops of coal have also been found below Fort McMurray.

The forests of this section are not of great value though a limited quantity of good white spruce is to be found along the Clearwater. At Whitemud Canyon, on this river, considerable water power might be developed. Limestone and some quartz is found here.

In crossing the province of Saskatchewan my route lay along what might be roughly defined as the dividing line between the limit of agricultural lands and the northern wastes. Though the Churchill river may be considered rather extreme as such a boundary yet generally speaking it makes a fair and easily defined limit. It is especially applicable to the forest growth of the province. Trees of good dimension are to be found this far north, but beyond this river the forest growth rapidly becomes stunted and sparse. Irregular patches of good farming and grazing lands are to be found extending here and there to the Churchill waters. At Ile a la Crosse, for instance, the fertile belt might be said to be just giving way to northern conditions.

All along the Churchill and bordering on the numerous lakes and rivers that feed it are to be found innumerable small areas of exceedingly fertile land, usually wooded. These areas present to that restless, frontier-loving class of farmer hunters an excellent opportunity to secure an independent livelihood in a manner acceptable to their peculiar dispositions. Here they can live their wild



1. Hudson's Bay post, Churchill.
2. Royal Northwest Mounted Police barracks, Churchill.
3. Gateway, Fort Prince of Wales.

4. Group of Esquimaux, flanked by whites, Churchill.
5. Esquimo's grave at Fort Prince of Wales.
6. Esquimaux whale boat, Churchill.

and care-free lives in comfort and plenty. A cozy cabin is soon constructed from the rocks and logs at hand, a stable is easily added and a small clearing fronting on the water and flanked by sheltering hills is soon planted and fenced in. Here the hardy woodsman makes his home. A few cows are kept without any great trouble and provide a continuous supply of milk, butter, and cheese. A few pigs and some poultry yield further produce. Hay, potatoes and garden vegetables are easily raised in abundance. A team of ponies or yoke of oxen will handle the work of the small farm if it increases to proportions beyond the scope of hand power, while a dog team for winter travel and a canoe for summer completes the transport equipment. Wood and water are free and convenient. Fish and game added to the produce of the land give an abundant food supply. During the winter trapping will yield a stock of furs which are readily disposed of for cash or traded for those necessities which must be secured from outside sources. Farming, hunting and prospecting, the lover of the wilds finds in one of these many nooks a haven in which to spend his days according to his heart's desire.

Waterpower is available in large blocks at various points on the Churchill and Sturgeon-Weir rivers. About seven miles below Stanley, where Rapid river joins the Churchill, there is an excellent site for power. It is on Rapid river, a few hundred feet from its mouth. The water supply should be plentiful as this river drains the great Lac la Ronge. At present there is no near market for this power were it developed but any small settlement could easily obtain power for local uses.

Fur and fish represent two of the greatest resources of Northern Saskatchewan proven and immediately available for use. A possible industry is the raising of reindeer. The great herds of caribou might be utilized to good advantage. Meat and hides from this source should amount to vast proportions.

In minerals there is a larger field for exploration. Prospecting has been carried on for many years at Lac la Ronge and other points. The presence of gold, copper and coal has been proven and it is possible that these may be found in commercial paying quantities. The northern part of this province is far from being a barren waste.

The field in Manitoba presents several interesting aspects. About The Pas there lies an extensive area of low flat land, now too wet for agricultural exploitation but apparently lending itself to a vast reclamation drainage scheme with promise of developing into an exceeding fertile area. It includes the valleys of the Saskatchewan and Carrot rivers as far east as Lake Winnipeg and north to intercept the limestone formation along the Hudson Bay Railway.

North of The Pas is found Manitoba's new copper fields which promise to produce a camp of considerable magnitude. Lying adjacent to the copper fields are rich gold areas which further tend to augment development in this direction. Between Norway House, at the north end of Lake Winnipeg, and Piquitoy, the half-way point on the Hudson Bay railway, lies an area offering possibilities in agricultural development and mineral production, in addition to being a heavy producer of fish and fur. About Cross lake gardens thrive exceedingly well. Easterly at Knee and God's lakes, in the vicinity of Oxford House, extensive gold fields have recently been discovered.

More agricultural land is found along the Hudson Bay railway, a particularly promising clay belt lying between miles 130 and 230. The forests of the northern part of this province do not include many large or valuable species of trees but nevertheless contain great quantities of pulpwood, ties, poles and cordwood. Water-power is found in almost unlimited dimensions, the Nelson river alone being capable of developing two and a half million horse-power. Grand Rapids, on the Saskatchewan, also offers an attractive site for power development, while the Churchill, Grassy, Burntwood, Hayes and other rivers have many good sites. The resources of Northern Manitoba are both extensive and varied.

Coming to Hudson Bay one cannot but be struck by the opportunity for obtaining great quantities of oil from the numerous "white whales" to be seen at almost any hour frolicking in the shallow water of Nelson and Churchill harbours. I counted a hundred of these in less than an hour which exposed themselves near our tug as we steamed up the Nelson roadway on the morning of August 31. Seals are fairly plentiful, polar bear reported scarce, white foxes numerous and caribou still plentiful though being badly harassed by wolves. An Arctic salmon, found about Churchill is a fish of more than ordinary delicacy.

The northern Laurentian portions of the Prairie Provinces are full of promise and their natural resources are worthy of careful administration and judicious protection.

The Department
of the Interior
Ottawa, Canada.
through its Natur-
al Resources In-
telligence Branch
provides an Intelli-
gence Service
which is at your
disposal.

The Department
of the Interior
Ottawa, Canada.
through its Natur-
al Resources In-
telligence Branch
provides an Intelli-
gence Service
which is at your
disposal.



